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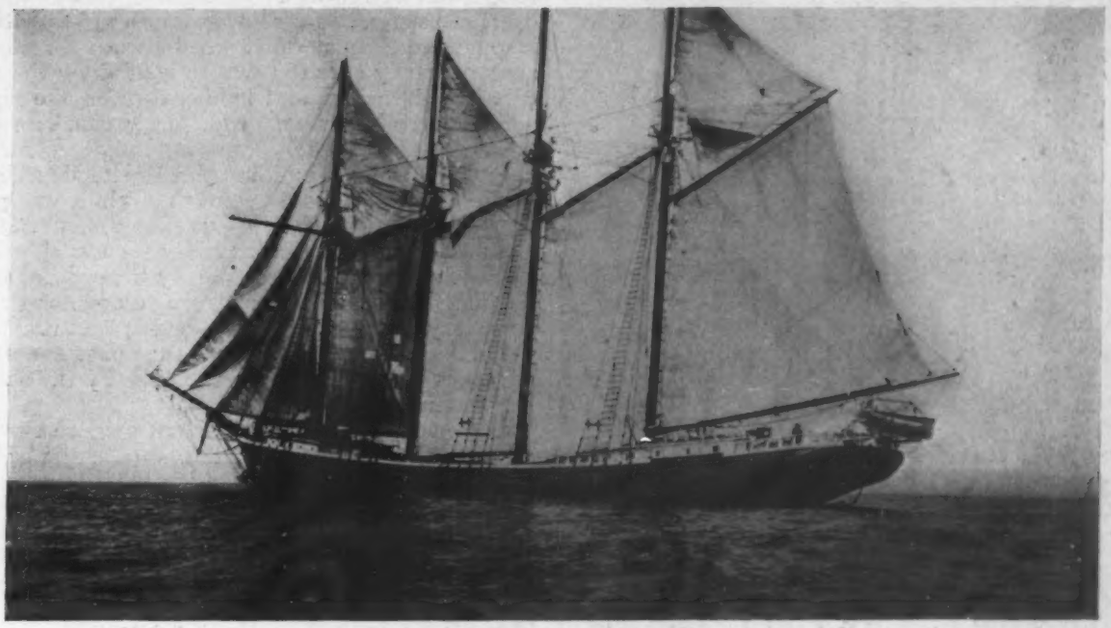


"Sixty days from Axim, Africa."

Honor Where Due

Some Remarks About the Big Fore-and-Afters Which Still Carry Our Flag to Sea

By JOHN T. ROWLAND

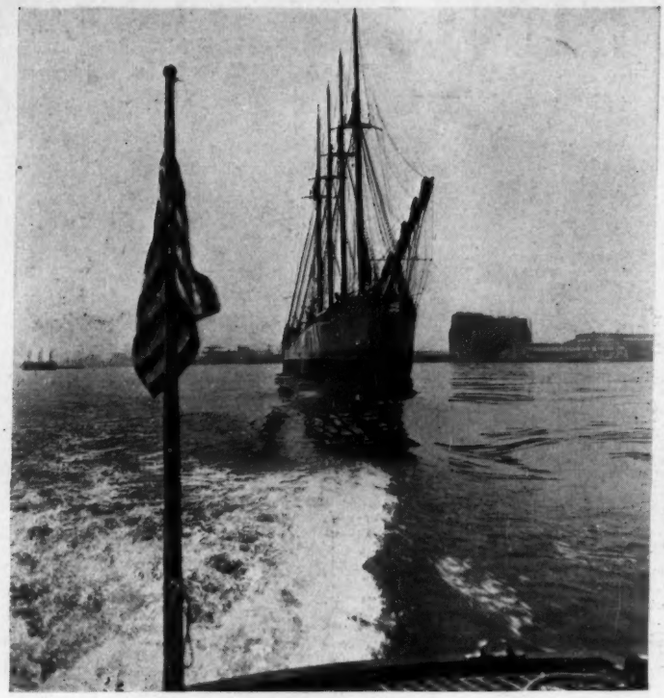
IT seems that most yachtsmen feel a sort of pitying contempt for coasters. I, personally, do not think I've ever heard a kind word said for one, although the rummest little "crate" that fishes on Georges is generally regarded nowadays with reverent awe. The reason is not far to seek: it lies in the easy, graceful lines of the fisherman as contrasted with the full and heavy ones of the coaster.

What was it the Romans called their freighters? "Round ships," I think it was, in distinction to the *naves longae* which were the scout cruisers and destroyers of those oar-loving days. I remember studying the picture of a bowl-shaped merchantman in my *Commentaries* and wondering how those ancient seafarers managed to make voyages to the Cassiterides (which we nowadays call the Scilly Isles) and come back safe through the Pillars of Hercules loaded to their ports with ore. They were bulk cargo ships, just as our big coasters are principally today. Cedar from Lebanon, tin from Britain, grain from Egypt — it would be easy to match their ladings with those borne by our own four-masted schooners; and in both cases the designers doubtless came by similar courses to the same conclusion, namely, that a freighter is useless unless she can carry a load. So the easy lines of the "long ship" were abandoned in favor of a greater capacity of hold, just as the fine entrance of the clipper has been sacrificed to give a form which may compete economically with steam.

But here is the thing to remark: in each case the loss in handiness is put up to the master to overcome. It does not seem much of a feat, after all, to handle a fine, smart little Gloucester schooner with a husky crew of men; one would be rather "wooden" not to come out where he desired. But to go to sea in a great hulk drawing 17 feet of water and loaded with 1500 tons of dead weight, having no other power than that of her sails and only the help of a donkey engine and a few green hands to work those, to be hampered moreover by rotten canvas and old gear, and yet to make a voyage to Trinidad or the River Plate and back in the space of a few months without loss — there you have something that still calls for seamanship of the old-fashioned sort. And the same holds good, perhaps more so, of vessels that go "down east" in midwinter — to Boston, Portland, St. John, even to Nova Scotia and Newfoundland, loaded to the deck with coal. It is easy to scoff, but next time you speed past some big lump of a four-master that behaves as though rooted to bottom just stop and think where she may have been.

Perhaps I have been too ready to accept the slurs. The fact is that one of these big Yankee schooners is a masterpiece in her way. It happens that her way differs somewhat from that of the fish killers, but it is no less worthy of honor for that. The conditions her design must fulfill are probably the most difficult by which a naval architect has ever been confronted, and the way in which our down-east shipwrights managed to harmonize seeming contradictions is rather wonderful when you come to study it a bit.

It was the failure of the square-riggers to compete with



"There is a reason for the high clipper bow and the steeve to the nose pole."

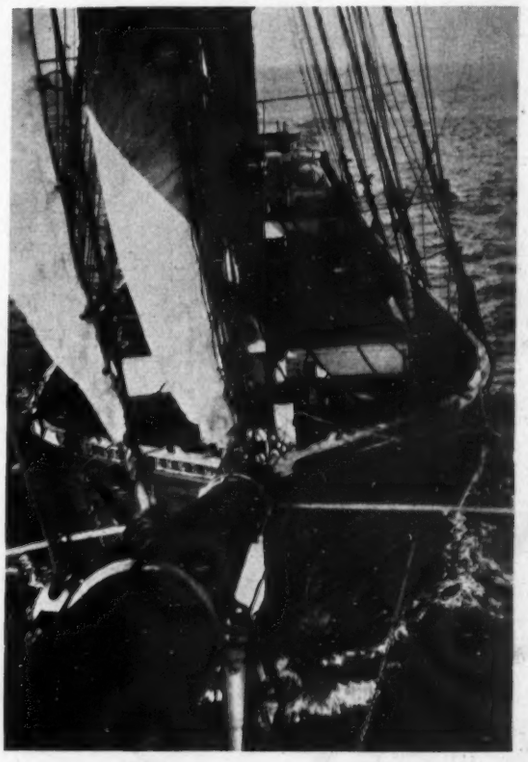
steam that led enterprising builders to consider the possibilities of the fore-and-aft rig, which hitherto had only been used for small vessels. The great difficulty with the clippers was their enormous crews, which became prohibitive when wages soared. When the clippers passed the crews of the square-rigged cargo carriers were cut to the minimum possible. To reduce these further without decreasing the vessels' size, and at the same time turn out a ship which could make coasting voyages against contrary winds; to produce a sturdy flat-floored hull that would take no damage by beaching on the Fundy flats and yet could work to windward in a Hatteras gale, one which would be deep enough to ride out a blow at sea, yet able to ascend the shallow southern rivers, and finally to produce a sailing vessel on a large scale which, in spite of the conditions mentioned, could make a long deep water voyage in fair time when occasion demanded — there was a proposition to turn a designer's hair grey.

I may be getting ahead of myself, but right here I must tell you how well it has been answered by citing the case of a particular ship that I know. She is a four-masted schooner of 1400 tons dead-weight capacity (about 200 feet long o.a.) and she carries a complement of only nine people, all told. She has made a voyage from Axim, on the West Coast of Africa, to Boston in 60 days with a full cargo of mahogany logs; from Blue Hill, Maine, to Trinidad in about three weeks with three million barrel staves in her hold and on deck; from Trinidad to Mobile in 15 days with asphalt; and from Brunswick, Georgia, to New York in 11 days in midwinter with 612 ninety-foot sticks of piling on board. I have known her to beat into a narrow harbor in the West Indies and berth herself where there was no tug to help; I have seen her perched high and dry beside a Fundy dock with 1250 tons of rock in her hold, and I have known her to do her 10 knots, loaded, for three days running before an easterly gale, although that is her worst point of sailing. And yet yachtsmen have the cheek to call such vessels old tubs!

For one who has been fond of navigating great waters in small yachts the big fore-and-after holds a paradoxical charm, because she is the nearest thing to a single-hander that exists above 30 feet in length. Far fetched this may sound, yet it is, in my experience, literally true.

Several summers ago I made a run in one which carried no sailors and no mate (although a few country lads and myself were down on articles) and in which the skipper and donkey-engineer were the only qualified people. Yet I made out well enough by imagining that I was sailing an oversized sloop, and the boys were all right when they had learned the obvious difference between a halliard and a sheet: all they ever did was to lead along the rope indicated to the winch and hold a turn on the nigger-head while the donkeyman gave her the steam. This latter was an artist at his trade; he knew not only to a hair how high each sail should go and how flat the huge fore-and-afters would stand, but just how much strain it was safe to put on a down-haul when dousing sail in a squall. The skipper was unusually fortunate in having such an able winchman. For the winch itself is practically the crew of such a vessel, with the few hands as mere accessories to make the necessary mechanical connection between it and the sails. With that their usefulness ceases: nearly everything that partakes of intelligent effort is done by the skipper himself. Even to mending sails.

Under such conditions it is not strange that a unique technic has been developed. The old-style sail-handling depended altogether upon men; blow high or blow low Jack ran aloft and smothered the struggling canvas by sheer beef and guts, thereby frequently saving the day despite bad judgment, indifference or bravado on the part of his superiors. The schooner skipper has no such last resort. A donkey engine cannot hand or reef a sail, so the skipper well knows that unless he lowers them in time no power but God Almighty's will get the great rhomboids down — and when He does it there is not apt to be much left but shreds. Accordingly the master of a modern coaster has to be ever on the alert and thinking several hours ahead. If the sea is getting up and the sky looks hard and windy he has the alternative of shortening sail before he needs to, or of hanging on and taking a chance



Two hundred feet of ship seen from the jibboom end.

The effect of not shortening down in time in a large fore-and-after. From a photograph by N. L. Stebbins, and reproduced from YACHTING, 1912.

on having his canvas blown away. The same thing applies, naturally, to whether he shall run or heave-to, and the result is that in no other type of ship are weather wisdom and real judgment such important factors. Give me a down-east coaster skipper every time for a man who knows his stuff. The fish killers don't belong in the same class.

I knew a master who sailed a big four-sticker all through the West Indies discharging piecemeal a cargo of thirty-thousand ten-gallon cases of kerosene. He sailed from Port Arthur, on the west side of the Gulf, in the middle of August. The winds were light and it would have been impossible to get through the Yucatan channel against the strong current setting north. The "trades" in the Caribbean would also have been ahead. Accordingly he stood to the eastward and went out through the Straits of Florida with the Gulf Stream. Holding this with a fair wind for several days he made good time to about 30° N., where he swung her off and ran east again until Bermuda bore north. Then he shaped a course to the southeast and after a week or more of "light airs and variable" drew into the edge of the northeast trade winds. He had now a sure source of power, but even so care was needed not to let the vessel sag off, for had she done so there would have been no way to get back except by swinging clear round the circle a second time.

Going south he met a hurricane, but brought the wind on his quarter and ran out of it without losing any sails. He stood well to windward of his destination and when at last the island of Martinique was under his lee he ran down for it and made his first port of call. Having discharged there the allotted portion of his cargo, he ran down wind through the whole chain of the Antilles, visiting each of his ports in turn and docking the vessel without the aid of a tug. Samana Bay, in San Domingo, gave him a little trouble as the waters are treacherous and poorly charted and he had to beat out of it with the trades in his teeth; but he gained the Mona Passage at last and was able to make a fair wind.

This voyage would have been one to write home about had you made it in a smart schooner yacht, yet this man did it with a ship which during the first part was loaded to 17 feet, and towards the end was so light that she would not tack and it was necessary to lower the spanker each time to wear her around. But to her skipper it was part of the day's work, tedious and vexatious in part but not remarkable in any other respect. The only thing he complained of was the time wasted in port due to the worthlessness of native stevedores. And it is to be noted that while this ship might have driven a fisherman crazy she was nevertheless able to "deliver the goods," handled by a master who had the requisite knowledge and skill. She carried 1400 tons of freight and had a crew of master, mate, winchman, cook and four colored sailors — about what you might need on a 70-foot schooner yacht. Her spanker alone would make a whole suit of sails of such a craft.

You may always notice a fine pair of "mud-hooks" on the bows, and it is not for ornament that the coasting skipper has ground tackle of the best. Where the old school windjammer used to claw offshore to meet a gale the big coaster very often hunts the beach and plants his two anchors, backed by a long scope of chain. There are several good reasons for this departure from standard

"There seemed to be a critical point in the wind's force below which she would scarcely move."

seamanship. In the first place the most severe and longest gales are from the north and west, from which the Atlantic coast in most parts offers a lee. Also, the bottom is shelving and the vessels are so big that they can anchor a dozen miles from the beach and not feel the sea if the wind is off the land. But even when caught on a dead lee shore like Cape Cod in an easterly gale they will often anchor and ride it out. This is one reason for the high clipper bows and raking nose poles. A square-rigger could not do it owing to the tremendous wind resistance of her spars aloft. If, however, she is caught far at sea your coaster will heave-to under a bit of storm sail — usually a reefed main or a trysail on one of the after masts — and lie as comfortably as any other ship.

It is not that she is forced to anchor off the beach, but that her ability to do so successfully is a great advantage which most large sailing ships do not possess. She can thus always hold what she has gained. It is especially valuable on long coasting voyages where good harbors are few and the water is shallow, as off the Carolinas, with promontories like Hatteras to pass.

I shall never forget my surprise the first time I helped get a big four-master underway. Instead of half a day it took less than a half hour to hoist the four big lower sails. No jigs or watch-tackles to sweat up — the "iron sailor" up forward certainly made for simplicity of gear. He also hove up the anchor at a merry clip. Leaving me at the wheel, the skipper ran forward to supervise hoisting the jibs. When these were set and the ship began to pay off I put my helm hard down to meet her; but I might as well have stuck out an oar over the stern. Off she swung, further and further, until her raking jibboom pointed for the tree-tops not many hundred yards away. At last, with a fresh breeze over her quarter, the straining canvas overcame the tremendous inertia of her deep laden hull and she began to move, with a mound of water against her lee side and whirlpools in her wake. Slowly then she rounded up towards the wind; I put my helm hard up and succeeded in catching her before she went about. It took her a good five minutes to gather way, but once she had done so she balanced as nicely as a yacht. Her speed in a nice fresh breeze was about seven knots — a trifle better than that of the average small tramp.

One curious thing I noticed quite early in this voyage was that there seemed to be a critical point in the wind's force below which she would scarcely move at all. This was the point at which whitecaps began to appear, and it was astonishing to see how rapidly her speed increased once this point was passed. With a whole sail breeze of twenty knots she would do a good eight, on the wind, and perhaps nine with a quartering sea. She was so stiff and the masts were so heavily stayed that the only thing we had to look out for was our canvas and lighter spars. At about thirty knots topsails would be clewed up, and when it blew a moderate gale the foresail would be lowered (it was rotten and old) and the spanker double reefed to balance. We had to watch our canvas more carefully when running off than close hauled, owing to the fact that in the latter instance the sails spilled the wind. Our great bugaboo was leeway, which lessened as the ship's speed increased, but the skipper was always careful to note the course made good.

This leeway puzzled me more than a little, since the vessel was wall sided for two-thirds of her length and drew 17 feet. It seemed as though that should have given sufficient lateral resistance to hold her, but it did not. She was almost flat underneath and had a straight keel about two feet deep. The skipper subsequently added a false keel or shoe only six inches deep, and I have been told that that trifling addition reduced her leeway by half. Apparently it is the lateral plane *in dead water* that counts.

The coasting skipper.

When we tacked the only thing that had to be handled was the jibsheets. Sometimes all hands would run forward to do that, the helmsman leaving the wheel in a becket with helm hard-a-lee. Of course, all but the spanker topsail would previously have been clewed. When we reefed a sail it would be lowered down on deck; the operation of tieing in the reef was about like baling a carpet. The reef points were three-inch manila. All these activities were supervised personally by the skipper, who was kept thin running the length of her two-hundred-foot deck. He would even let go the anchor with his own hands.

This may not sound exciting, but one has only to be on one of these big vessels when wind and sea take command to witness action a-plenty. One skipper I know was coming out of the Bay of Fundy in midwinter two years ago when, about off Schoodig, he ran into a northwest gale with snow. He had recently come up from Norfolk with a negro crew, and these men were useless in face of the bitter cold. The master, mate and donkey-engineer managed to get the spanker down before things froze up. After that they were helpless. The skipper and mate alternated at the wheel, hoping to make a lee and anchor in some Maine port, but the wind headed them and drove

(*Continued on page 122*)

Rödwig Harbor, where we were stormbound for three days.

The Log of the *Ariel*

Being the Account of a Short Cruise in Danish Waters

By Franklin Remington

I CALL this a landlubber's log, as it contains not many nautical terms, being written for land crabs and porch cruisers rather than for the old sea dog, who is supposed to shiver his timbers and live on salt spume — whatever that is. For the sake of conciseness I have, however, held it to the conventional log book form of daily entries.

Thursday — July 22, 1926. Arrived Copenhagen 7 P.M. My future shipmate, Salto, met me at the station. Then hotel, where baggage deposited, Salto telephones to Mr. Østergaard, owner and future deckhand of sloop *Ariel*, which I had chartered, to meet us after dinner so we can inspect her. Dine together at the Royal Danish Yacht Club, then take taxi to *Ariel's* anchorage.

Ariel's owner's name sounds to me like oyster cracker. These Danish Øs are too much for me, so "Oystercracker" he is christened and known from now on.

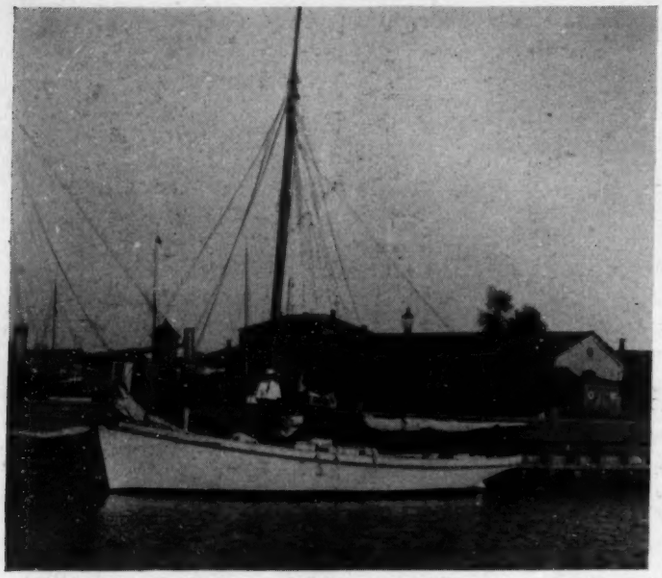
It was just as well for *Ariel*, perhaps, that it was dark when we inspected her. As Benjamin Franklin once wisely remarked, "All cats look alike in the dark." He might have added, sheets, halliards, running and standing rigging as well. *Ariel* looked powerful and seaworthy in the darkness. Large and roomy — 37 feet long by 13 feet beam and about 6 feet draft, sloop rigged. Everything looked fine. So do whited sepulchres. Owner "Oystercracker" was to go with us as cook, deckhand and general utility man. We arranged with him to purchase a certain list of supplies on the following day, while we were busy getting various things needed for the trip. It was arranged that Mr. and Mrs. Salto and I would dine together and S. and I would go aboard after dinner, sleep on board and up anchor early the next morning. Again *Ariel* was favored by darkness, for it was about eleven o'clock when we climbed aboard and turned in.

Saturday — July 24. Up at 5. Fine morning. Nice breeze. Wind abeam. Up anchor and off to the southward, after breakfast, by 6 o'clock. Daylight began to disclose various shortcomings on *Ariel's* part. Like many of her sex, she couldn't stand close inspection in the rude light of day. To begin with, the mainsail was rotten and looked like Rip Van Winkle's pants — all patches. The sheets were rotten, standing rigging looked very doubtful, ground tackle light and little of it; in fact, *Ariel* looked like a good old blowsy dame who had seen her best days, dressed up in her relatives' cast-off and worn-out clothes. However, we were off and it was too late to do anything else but hope for the best.

We sailed out of Copenhagen south, past the forts which guard the entrance to the harbor, past the main harbor where a large fleet of yachts had gathered for the annual regatta of the Royal Danish Yacht Club. The fleet was impressive, both in quantity and quality. Yachts flying British, Danish, German, French, Italian, Swedish, Norwegian and other flags were anchored off the club. It looked like Larchmont during race week. Two large yacht basins near the club were jammed full of boats, all moored bow and stern along the bulkheads and close alongside each other. It was noticeable that the German yachts flew the old Imperial ensign. Some compromised by flying the new Republic's colors with an Imperial eagle in the upper corner.

The King's yacht, a smart 10-meter sloop, was anchored off the clubhouse. They say he is a first-class sailorman, sails his own boat and doesn't ask odds of anyone. He is 6 feet 7 inches tall, well built and seems to be a worthy descendant of the old Vikings. Some twenty or thirty warships — light cruisers and torpedo boats — all dolled up for the occasion, added to the scene. The yacht clubhouse is a fine building with an excellent cuisine. We dined there the night I arrived. Excellent dinner; in fact, all over Denmark, even in the smallest places, the cooking and food is very good. Whenever we dined ashore we were sure of a good dinner.

As we sailed along, with the waterfront of the city on the starboard hand, we passed the place where the Battle of Copenhagen was fought between the British, under



Ariel in Nyborg Harbor. Our first inspection of her was favored by darkness.

Nelson, and the Danish fleet, in 1801. England was then in a life and death struggle with Napoleon. Fearing Denmark might be coerced by Napoleon and her powerful fleet turned against her, England declared war on Denmark before the Danish fleet had been put in commission and Nelson sailed for Copenhagen with the intention of destroying it.

The Danes, however, though unprepared, anchored their fleet in front of the city, bow and stern, with the ends of the line protected by forts, and put up a stiff fight. Two of the Danish line of battleships were sunk and we passed the buoy which marks their grave. They can be seen when the water is calm as they went down in 6 to 7 fathoms.

The wind freshened and old *Ariel* stepped out to the tune of seven knots or so, when, without warning, bang! went the jib sheet to a great shaking and clattering of blocks. Deckhand and owner, "Oystercracker," seemed to take it philosophically and as a matter of course, and tied another old rope to the dangling end of the jib sheet, and we proceeded again merrily on our way. This performance prompted us to examine the sheets and halliards more closely. I opened up the throat halliard of the mainsail and pulled its inside fibres off in chunks. The standing rigging looked little better. Only one anchor, and when questioned on this subject "Oystercracker" produces a round cannon ball about 50 pounds weight with a ring in it and a hawser attached, which he claims, in Danish equivalent, to be "hot stuff" and "the best ever." How, if *Ariel* starts to drag her anchor, he ever expects to get his cannon ball hooked in to the bottom is a mystery of which apparently he alone knows the solution. "Oystercracker" seems to have discovered a hitherto unknown quality of cannon balls. We hope he is right, but subsequent events in which "Oystercracker" showed the sterling seamanship, which he had acquired while climbing the Alps, made us a bit dubious as to his cannon ball theories.

About 1 o'clock the wind freshened and the barometer started falling rapidly. The falling barometer and *Ariel's* condition were not a happy combination. About 5 o'clock the wind began to die out and a great bank of black clouds began piling up in the N.W. The grumblings of thunder in the distance warned us to look for cover, as the barometer showed symptoms of sinking into the cellar. We consulted the chart and found that the small harbor of Rödwig lay abeam of us down wind. "Oystercracker" was all for Rödwig. He was always for a snug berth alongside a wharf in a tight little harbor, and perhaps that throws some light on his cannon ball theories. However, all agreed that Rödwig was a good place to get in, so we headed for it. It was well we did. We made it by 7 o'clock. Eight o'clock the storm broke. Thunder, lightning, rain, hail and a raging wind. The Copenhagen papers called it a hurricane and were full of reports of ships coming in with sails blown away and generally broken up. It lasted four days. The barometer was out of sight. The thermometer kept it company and went below 50. There was no stirring out of Rödwig for three days. The wind came in fierce squalls and the sea outside ran high.

Just after we pulled into Rödwig harbor a German yacht came in flying the Imperial German colors. She was a fine, up-to-date sloop about 28 feet waterline. Three Germans manned her. Their maneuvers once inside the harbor brought all hands on deck and stirred up the local fishermen to great merriment. After careering about in an aimless fashion, they wound up by charging the bulkhead, bow on, full speed ahead, her bow rising high up on one of the string pieces of the bulkhead. They, too, must have learned seamanship in the Alps.

Sunday — July 25. Strong gale, squalls and rain. Nothing doing. In the morning we explored the village and took a walk in the country through some beautiful woods. Rödwig is all fishing. Fishing is done in small, double-ended boats, generally sloop rigged, with a simple low-speed single-cylinder engine. All fishing is done with nets. The harbor is typical of innumerable harbors all along the Danish coast. They are about the size of the small fishing harbor on Block Island. The harbors are generally well filled with fishermen, and they moor close alongside each other, bow out and stern made fast to the bulkhead.

In the afternoon we took another walk and found a sheltered place beneath a high cliff where we went in swimming. The water was cold and bracing.

Monday — July 26. Still blowing a gale from the N.W. Cold, showers and sun. Unable to leave Rödwig. Monday afternoon, hearing there was to be a farmers' gathering at a small place five miles or so inland, we took a local bus and went over to see it. Quite amusing. The farmers and their families for miles around had all come together and were having a reunion with sports and feasting and drinking in the open air. They had tilting at the ring on horseback and fencing on horseback in which the contestants whacked each other lustily over the head with heavy, dull swords. They wore a sort of padded armour and heavy helmets and face guards. The crowd was respectable, orderly and remarkably well dressed, the women and girls being far better looking and mannered than a similar gathering in the U. S. A. No lipsticks, paint

One of the Chalk Cliffs of the Danish Coast near Rödwig.

"Oystercracker" and *Ariel*, at Copenhagen.

A Dutchman in the "Beech Current."

Captain Salto (left) and the author, ready for shore.

or powder, but instead the most beautiful creamy pink and white complexions. Nearly all blondes with yellow hair and blue eyes. The men and boys were an upstanding, good-looking lot, with fine faces.

After the meeting we returned to Rödwig and varied our diet by having an excellent dinner at the Rödwig "Kro," which in U. S. A. means Hotel. Then, as the estimable Pepys would say, "to bed and to sleep."

Tuesday — July 27. Still blowing a gale and the barometer hiding in the cellar. A suggestion on our part that we put three reefs in the mainsail and with the staysail make a try for it, brings out the astonishing information from "Oystercracker" that the mainsail cannot be reefed — too old. Wouldn't stand it. This certainly is the limit. We are getting fed up on watchful waiting, but under the circumstances nothing else to do, so we took the 8:20 train for Roskilde, about two hours away, the old capital of Denmark, where all the kings of Denmark are buried from the time of old Canute, the Danish king who ruled England, Denmark, Norway, Sweden and a good bit of Germany. Very interesting place. Very old, with a fine old cathedral built in 1000 or 1100 in which all the Kings and Queens lie in stone and oak coffins. This was the chief center and gathering place of the old Vikings. In the cathedral was a stone column where the last dozen Kings of Denmark, including Peter the Great of Russia, have stood up and had their height recorded by a line cut in the stone column. Peter the Great was well named. I stood up against the column and Peter's mark was a good eight or nine inches above my head, and I am six feet one in my shoes.

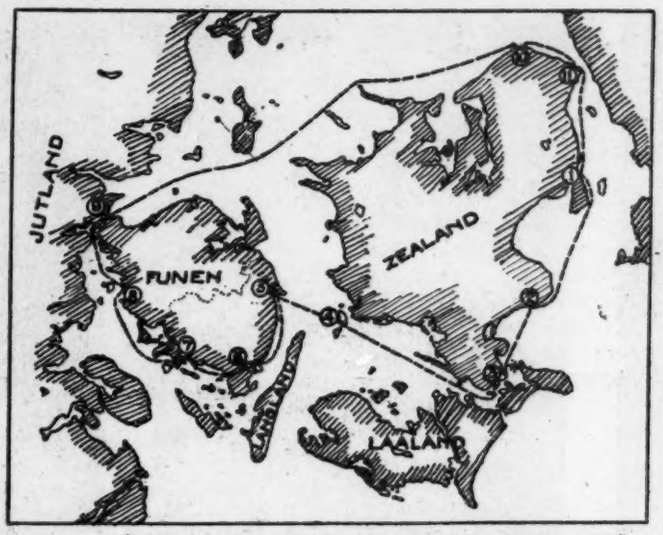
Returning to Rödwig along the coast we saw a small boat with one small sail reefed down, struggling along against the wind and sea, making short tacks along the shore. It appeared to be an open boat, low freeboard, on the yacht order, with two men aboard. The sea was rough and the spray was going over her in clouds. An hour or so after we had got back to *Ariel* and just as it was getting dark, in came the boat we had been looking at. At the tiller was a fine-looking elderly man with a grey pointed beard. He was unmistakably a gentleman. His boy, a lad of 17, was with him. He made a landing alongside the wharf a short distance from where we were lying. We all lined up to look the newcomer over. He flew a strange flag and spoke a language which Salto, who is familiar with all the Scandinavian dialects, German, Dutch, etc., said he had never heard before. Hearing us speak English, he asked us in perfect English if we were Britishers. I replied that I was an American. It was then getting dark and quite cold. They had the lightest clothes on, the boy a pair of linen trousers and no shoes or stockings.

As they were cold and wet, we asked them if they would not come aboard and have a cup of hot coffee. "Delighted," said the older man, "but that is only half my family." He whistled and we thought a dog would appear, but instead up bobbed a little head from under a canvas tarpaulin which lay in the bottom of the boat and a small boy of 11 emerged. "Fine, bring him along," said we. "Oh, but that's not all," says he, "I have my daughter with me." He called her by name and out from under the tarpaulin crawled a fine, husky girl of 15. "Bring them all along," said we and we gathered in *Ariel's* cabin. Old "Oystercracker" made a fine brew of coffee and we fed them cakes and coffee while the skipper unfolded a marvelous tale.

He was a Pole, of course with an unpronounceable name, the president of a bank in Warsaw, Poland. He had sailed all the way from Warsaw, flying the colors of the Warsaw Yacht Club, up to Copenhagen, over to Sweden and was now on his way home. His boat was a lightly built open craft, decked only as far as the mast, quite low in the water. She was a centerboard sloop, 21 feet long, 6 feet beam and drew 10 inches with the board up. Her name was *Doris*. He had sailed down the Vistula to some spot where a canal took him into Germany, not far from Berlin, and finally landed him in the Oder River.

The harbor of Assens, Island of Fünen, showing Dutch Galleots moored to bulkhead.

Then down the Oder, past Stettin into the Baltic; then along the Baltic coast of Germany to a spot where the nearest Danish island was 40 miles away. Out to sea he went with his three children, crossed the Baltic and landed in Denmark. It took him 20 hours to make the passage across the Baltic and he said the sea was very rough. Then along the Danish coast he worked his way up to Copenhagen. Here he crossed the Sound and went along the Swedish coast to Malmoe. Then back again across the Sound to a small harbor near Rödwig where he lay during the first two days of the storm and the third day he put to sea and came to Rödwig. All in an open boat which I would think a long time about before taking a cruise in her on Long Island Sound. Our hats were off to Ludwig Szwykowski — that's his name, for he gave me his card. He turned out to be a delightful man, modest and charming, and his family equally so.



The course of the *Ariel* around Denmark. 1. Copenhagen; 2. Rödwig; 3. Kallehaven; 4. Aggerso; 5. Nyborg; 6. Svenborg; 7. Faaborg; 8. Assens; 9. Fredericia; 10. Gilleleie; 11. Elsinore.

Later on, before turning in, we went around to look at *Doris* to see how he managed for the night. He had his boom hoisted up on his mast to give him about five-foot headroom and over the boom he had a canvas cover laced down at the sides with forward end enclosed, and flaps on the after end. A snug little tent. His daughter did the cooking, the small boy was scullion and the older boy and his father navigated the ship.

Wednesday — July 28. Still blowing hard and dirty looking but the barometer showed indications of coming out of hiding. Salto and I were now completely fed up on harbor yachting and were for putting reefs in *Ariel's* mainsail and blowing her out if need be. "Oystercracker" then produces a topsail and suggests we use it as a storm trysail. This we agree to, and though it fits about as well as a fire sale suit of clothes we are off close hauled with the wind blowing N.N.W. for the narrow Beechwood channel which leads to Kallehaven. It was a beat to windward and with the channel at times not over 75 yards wide, we had our hands full, as *Ariel* under staysail and storm trysail was about as agile as a cow. However, apart from the staysail sheet block coming apart we held together and made Kallehaven harbor about 7 P.M. Nice little landlocked harbor where we tied up to a wharf for the night.

Thursday — July 29. Daylight in this latitude at this time of the year begins about 3 A.M. We were up at four, breakfasted and off with a fine wind and full sail along the southern coast of the Island of Seeland, through many channels and past many beautiful islands. Every now and then we sailed by interesting old manor houses and castles, the estates of the Danish nobility. The barometer was rising slowly. The combination of sea and islands in the highest state of cultivation with beautiful woods leading down to the edge of the water, was a wonderful picture. In the afternoon the wind died down and we had a smart squall. We lowered *Ariel's* mainsail for safety's sake but it soon passed over and we were again on our way. By 7 P.M. the wind again fell flat and as we were a good four miles from any anchorage we subsidized a passing fisherman to tow us into the harbor of Aggerso on an island of the same name. We got in about 8 P.M. This was a most interesting little place, entirely given over to fishing. No outside influences seemed to have penetrated this remote spot. The harbor was full of fishermen and on shore nets and fishing gear monopolized the open spaces. The cottages of the fishermen were neat and, as usual in Denmark, surrounded with flowers. We were, I imagine, the topic of conversation of Aggerso.

Friday — July 30. Off by 6 A.M. A fisherman going out of the harbor gave us a friendly tow out into the channel. Aggerso is an island that runs north and south. The channel round the northern end leads into the Great Belt, a body of water about 25 miles wide at this spot running north and south and connecting the Cattegat on the north with the Baltic on the south. As we rounded the northern end of Aggerso Island the wind was N. by W. and as our course lay west across the Big Belt to the town of Nyborg we had at the outset a beam wind, which drove us along in good shape. The wind kept increasing and with it considerable sea. *Ariel* did her best and attained about eight knots at times. Nyborg is on the Island of Funen and as we neared the coast the wind hauled to the westward and finally compelled us to tack. The day was glorious and the sail across the Big Belt exhilarating. We made Nyborg harbor by 1 P.M.

Nyborg is a most interesting place. Very old and in the middle ages a community of stiff necked old burghers who fitted out their own fleets and acted in such an independent manner that the then King of Denmark, in the twelfth century, built a strong fortress castle to overawe them. It apparently is as good today as the day it was built. The walls are 9 feet thick. Around the top of the building ran a corridor inside the wall from which archers and crossbowmen could fire through slits in the outside wall, and every 15 feet were openings pointed downward where boiling oil and water could be poured down on anyone attempting to scale the walls. Every precaution taken apparently to give an uninvited guest a warm reception. Around the whole castle runs a moat, filled with water through a connection with the sea. The castle put an effectual quietus on the exuberance of the burghers of Nyborg.

We dined at an old-time inn of the coach-and-four days. An archway led under the building to the enclosed yard within, where the stables for the horses were located. The inn was kept up in fine shape and we had a most excellent dinner amid mid-Victorian surroundings.

We turned in aboard the *Ariel* that night well satisfied with life in general, and particularly so in Denmark.

Saturday — July 31. Off to an early start — 5 A.M. Beam wind down the coast of Funen. This is a beautiful island. We ran between this island and a long narrow island appropriately named Long Island. The day was glorious, bright warm sunshine and a fine breeze. About 25 miles down the coast we headed N.W. into the narrow channel which leads to Svenborg. This brought the wind dead ahead. The channel was very narrow and in places not over 50 yards wide and the current running very

(*Continued on page 112*)

Saga — A Smart, Fast Cruiser, 68 Feet in Length

The fast coastwise cruiser *Saga*, owned by Hugh C. Creswell, is one of last season's contributions to the large fleet of speedy yachts in New York waters. Built by the Consolidated Shipbuilding Corporation, from designs by Cox & Stevens, she is 68 feet long, with a beam of 12 feet and 3 feet 8 inches draft. A speed of 23.8 miles per hour was attained with two Sterling Coast Guard engines.

The interior of *Saga* is well laid out, tastefully decorated and furnished, and is most comfortable for a long or a short cruise. There is also plenty of deck room, with a large sheltered deck amidships, with cushions on top of the cabin house. At the left is the attractive main cabin, while below are shown the bridge deck and the after double sleeping cabin.

Before Her Time

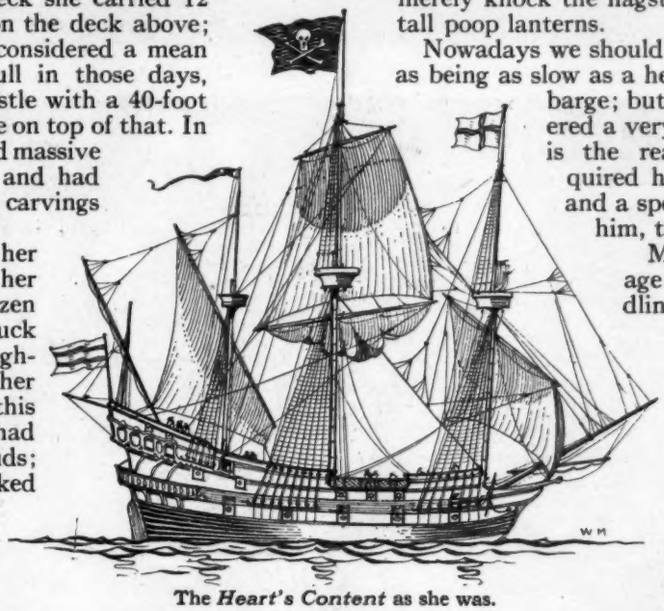
A Parable of the Sea

By Weston Martyr

THE *Heart's Content* was built in the year 1630 A.D. She was a typical deep-water ship of the period, 80 feet long, 26-foot beam, with 13-foot depth of hold; and her solidity, weight and general clumsiness may be judged from the fact that she displaced about 400 tons, and required a crew of 80 mariners (exclusive of gunners and fighting men) to handle her. Her bow was round and her stern square, and her great oak timbers were placed so closely together that you would have found it difficult to put your hand between them. Her thick planking was strengthened with longitudinal wales and vertical skids, and all these timbers stuck out a good six inches from her sides, offering a fine resistance to the water when the ship was heeled. On her main deck she carried 12 guns, with 18 smaller guns on the deck above; and because two decks was considered a mean allowance for an 80-foot hull in those days, they gave her a lofty forecastle with a 40-foot poop and a 20-foot aftercastle on top of that. In addition to all this she boasted massive quarter and stern galleries, and had some tons of assorted oaken carvings sprinkled all over her.

She had four masts, and her foremast raked forward and her mainmast aft, while the mizzen and bonaventure mizzen stuck more or less straight up. A high-steeved spar projected from her bows; and I refuse to call this thing a bowsprit, because it had neither bobstay nor shrouds; but in spite of this it was asked to take the pull of the forestay and foretopmast stay, and to support below it a large square spritsail as well. The tops on her fore, main and mizzen were enormous affairs, with solid bulwarks and ample room in each of them for a dozen men. Her standing rigging was hemp — thick rope and lots of it. For example, she had eight shrouds, four topmast shrouds and two backstays on each side of her mainmast, and this, plus the two stays, were 30 great thick ropes supporting the mainmast and topmast alone. When you remember her three other masts and her complicated maze of running rigging, you will perceive that the *Heart's Content* offered a considerable amount of wind resistance aloft, to say the least.

Five small sails were supposed to push this mass of material through the water — the fore and main courses and topsails, and a lateen mizzen. There were, I admit, two other pieces of canvas which could be set; but I feel that the spritsail and bonaventure must have been carried more for "majesty and terror of the enemy" than for use. The *Heart's Content* did not possess a single jib or staysail, because those sails had not then been invented; and, it seems to me, if anyone had happened to think of such things, he would not have been able to find a place to set them owing to the extraordinary tangle of rigging aloft and the fact that all stays were covered with crowsfeet and other strange attachments.



The *Heart's Content* as she was.

Here is a picture, in my best style, showing the *Heart's Content* close hauled on the starboard tack. It is a poor picture, because I am a poor draftsman; but it is, at any rate, historically correct — which is something. The mess below the bowsprit is the furled spritsail, and it is furled because it never would stand on a wind. The foreyard is cockbilled to render the foresail more effective — with the result that the foretopsail cannot be set. Her maintopsail is more or less drawing, thanks to its complicated system of bowlines; but they have given the main course up in disgust, it being too big and baggy to be useful except with a leading wind. The lateen mizzen is working; but, as it backwinds the bonaventure, that miserable affair has been furled along its yard. In any case they know only too well, if they set the bonaventure, the thing will merely knock the flagstaff overboard and foul those tall poop lanterns.

Nowadays we should think of the *Heart's Content* as being as slow as a hearse and as clumsy as a hay barge; but in her time she was considered a very fast and able vessel. Which is the reason Martin Fothergill acquired her; for Martin was a pirate and a speedy ship meant life itself to him, to say nothing of profits.

Martin Fothergill was an average sort of man, a fair to middling pirate and a fine sailor. He had a quick imagination, confidence in himself and the courage of his convictions; but otherwise he was just ordinary — like the rest of us. His outstanding characteristics are far from being uncommon; but they are not often combined in one person. When they are, the results are sometimes surprising.

The hunting-grounds which Martin favored were those waters to the north of the Grand Caicos, where from time to time he would fall foul of a homeward-bound Spaniard, reaching up through the dregs of the Trade towards the Sou'west passage winds. I regret to say, however, that, at the period of his career about which I am telling you, Martin's piratical activities were meeting with very little success. His luck was badly out, in fact. The trouble was that most of the vessels he fell in with turned out to be heavily armed three-deckers, so that Martin was forced to do a great deal more running away than chasing. This most lamentable state of affairs continued until, one fine day, the *Heart's Content* had only the night to thank for a narrow escape from a fat and unwieldy but, nevertheless, surprisingly speedy galleon. This distressing event caused Martin to think furiously. He thought for a long time — and he thought hard; and in the end that vivid imagination of his, which I have mentioned before, was mightily stirred — and a great light dawned upon Martin.

And in the glare of that light he saw what he had to do. He worked things out in his head, and when at last he had settled everything quite clearly and to his own satisfaction, he called his Mate and told him those things which he had made up his mind to do. I should like very much

to give you the exact words of that conversation; but I fear the ripe vernacular of those outspoken times would not look well in this family magazine. Also, I refuse to ape the pseudo-Elizabethan of the novelists; nor will I copy the books of the period, because even Shakespeare makes the Bos'un in *The Tempest* speak blank verse — which hardly seems quite true to life. I shall, therefore, have to content myself by conveying the sense of Martin's and his mate's remarks in some such words as we use today.

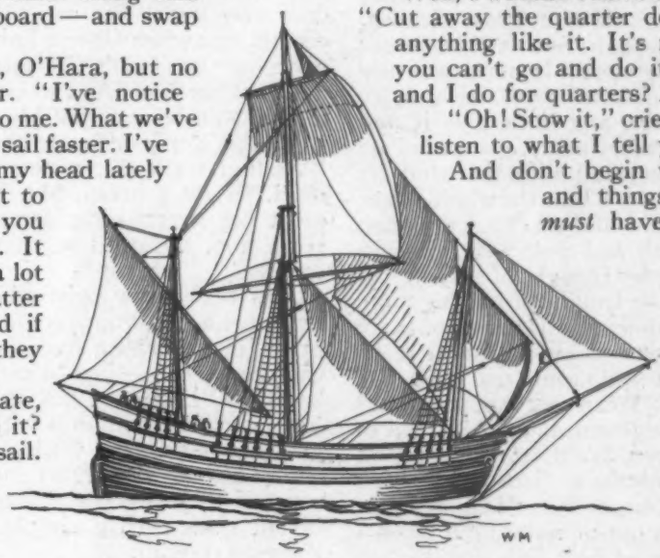
"You may have noticed, Mr. Mate," said Martin, "that, just lately, we've been running across a lot of craft which can out-fight us; but I don't suppose it's occurred to you that one of these fine days, if this goes on, we're pretty sure to meet a ship which can not only out-fight the *Heart's Content* but out-sail the poor old girl as well. I needn't point out that, when this happens, the sharks will be presented with a free lunch in the shape of you and me and the rest of the crowd. Something's got to be done."

"Sure," remarked the Mate, whose name was O'Hara. "We'll just have to wait until one of them fellers that can out-fight and out-sail us comes along and then we'll take him by the board — and swap ships. 'Tis easy."

"You've got lots of guts, O'Hara, but no sense," replied the Skipper. "I've notice that before. Now you listen to me. What we've got to do is to make this ship sail faster. I've been working things out in my head lately and I think I see what's got to be done. When I've told you what that is — we'll do it. It means taking a chance and a lot of hard work; but it's a matter of life and death to us, and if things turn out as I think they will it'll be worth it."

"That's right," said the Mate, "but how're we going to do it? We can't give her any more sail. She's crank enough as it is."

"I don't want anyone to tell me what we can't do, O'Hara. I know all about that. It's what we *can* do that interests me just now. We can cut away a lot of this tophamper for a start. I've been thinking it out, and I'll be hung if I can see what use it is anyway. All this carved work, for instance — the ship's nearly sunk with it. We'll turn the hands to with crowbars and axes the first thing in the morning, and chop the lot off her and let it go overboard."



The *Heart's Content* as she looked when Martin was through with her.

"Anything you say, Sir. But it'll make her look like Hell," said the Mate.

"Looks!" cried Martin. "Looks won't help us, man. What I'm after is *speed* — and tomorrow, O'Hara, you'll cut, hack and prize every damned piece of useless ornament off this ship. And while we're about it we'll saw off the stern and quarter galleries as well. They weigh tons and they do no work. Now, don't you open that mouth of yours again, because I've had enough of it. I know very well what can't be done, and I'm telling you now what we're going to do. You listen.

"When we've done what I've said then we'll go to work and adze off all the skids and wales we can reach. That'll lighten the ship a lot and save her dragging all that timber through the water. Her hull's too strong and heavy as it is, without all those damned skids; and I can't understand now why I never thought of getting rid of the cursed things before. And now I've had another thought. We'll run the ship in to French Cay and put her on the sand and do this job properly. I've seen a light, O'Hara. I see what we ought to do, and I mean to make the *Heart's Content* the fastest ship afloat. I can do it. And don't you go looking at me like that and thinking I've gone mad, because I haven't. I've been working it out in my mind for the last two months and it's all as clear as a bell. This ship's too heavy all over, and she's lumbered up with trimmings and tophamper till it's a wonder she can sail at all. I've been blind all my life; but now I can see. We've got to get rid of every single thing aboard that isn't working its passage. It stands to reason. That lumping great fo'c's'le, for instance, and the after-castle too. What's the good of 'em? None. So we'll cut 'em down — and the poop as well while we're about it. That'll lighten her a lot and do away with most of the windage. Up aloft, too, we're all wrong. We're a mess. Just look at those blame tops of ours! Why! you'd think a child could see that all they do is to stop us. I can see it, anyway, so we'll pull 'em down and throw 'em overboard."

"Well, I wouldn't have believed it," broke in the Mate. "Cut away the quarter deck! Bless me if I ever heard anything like it. It's never been done before, and you can't go and do it. For one thing, what'll you and I do for quarters? And if —"

"Oh! Stow it," cried the Captain. "Stow it — and listen to what I tell you, and do what you're told. And don't begin worrying me about quarters, and things that can't be done. If you *must* have a boudoir to yourself we'll run a bulkhead across the after end of the lower deck for you. But you make me tired with your 'quarters' and 'can't be dones.' You fetch me a good saw and an axe, my lad, and I'll soon show you if it can be done or not."

I regret to say that the rest of the conversation is quite unfit for publication, and so, with great reluctance, I shall have to suppress it. The Mate, you see, was a typical sailorman — typical both of his own times and ours. He was soaked in the traditions of his profession — pickled in them, in fact; wrapped up and tied in them; and they so blinded him that he could not see the virtue in anything new and untried. Therefore he scoffed, and his execrations were garnished with rude words. But the Skipper's soul was also hot within him. The zeal of the reformer, the eager expectation of the inventor, to say nothing of the pricking spur of necessity, all drove him on. Also he was a bigger man than the Mate and handier with his fists — which will suffice to explain why the *Heart's Content* was moored, one day, in a quiet and sheltered cove and had many unheard of things done to her by an inspired Skipper and a grousing and distrustful crew.

The first thing they did was to raze the ship from stem to stern, right down to the top of her upper deck bulwarks; and you know already the process of Martin's reasoning which led to this and to the cutting away of the stern galleries and all projecting wales and skids. When that job was done the *Heart's Content* lifted herself a good nine inches up in the water; and, in spite of this, it was plain to all hands that the ship was much

stiffer than before. They said, however, that the Skipper was crazy and the ship ruined; that she was bound to behave like a half-tide rock and drown the lot of them; that, if cutting a vessel in half was going to make her sail faster, it stood to reason someone would have done it long ago; and that the *Heart's Content* didn't look like a ship now, anyway, so how could any sane sailorman expect her to behave like one.

The Skipper, however, as I have said already, had the courage of his convictions. So, "That's about all I can do for her hull," said he. "If she was sharper in the bows, it stands to reason she would get through the water faster, and I think it would help if her run was finer, too; but that's too big a job for us to tackle, so we'll have to do the best we can for her aloft. It's on a wind, O'Hara, that we've got to improve her speed. If we can only do that and make her look up closer into the wind at the same time, then she'll out-sail any ship afloat — and even you'll have to admit that's worth trying for. We'll try it, anyhow.

"For a start, there's too much windage aloft, and the only way to cut that down is to cut down her rigging and spars. The tops must go, of course, and a lot of the standing rigging as well, for it's my belief she'd pull the channels out long before she'd part those eight great shrouds. I think four a side would be enough; but we'll leave her five. And then there's that foretopsail. It never was any use. We've never set that sail on a wind yet, because we can't stay the topmast properly, and if we give it any real work to do the spar would carry away. On a wind we never use the foretopsail either, and with the wind aft it's blanketed by the main — so we'll take the whole blame business down, topmast and yard and all. That spritsail, too, is nothing but a nuisance, and we'll get rid of it. Then, I don't know why we never thought of staying the bowsprit when we've gone to the trouble of putting more stays than enough on every other spar in the ship. If we stay that spar properly, it seems to me we ought to be able to set some sails on it that'll do some real good. We can't alter the main much that I can see, except to lead the braces and bowlines to the foremast head instead of through crowsfeet on the stays. We'll send down that silly mizzen topmast and top up the cro'jack yard with a purchase from the mizzenmast head. There's enough gear aloft there aft to lift the stern out of water, and when I look at it now I can't understand how I've managed to put up with all that mess so long."

"That's all very fine," put in the Mate. "We may be able to work it your way or we may not, and I think myself we'll be crazy to try it; but there's one thing clear, and that is, if you send down the mizzen topmast you can't set up the peak of the bonaventure at all."

"That's true enough, O'Hara. At least, it might be if I wanted to set up the bonaventure peak. But I don't. I'm going to abolish the damned thing altogether — mast, yard and sail. It's all useless gear, and we haven't used it a dozen times since we've been in the ship. All it's ever done is to foul the mizzen, and the mizzen's the best sail in the ship when it comes to beating to wind'ard. So I'm going to improve that sail. With the bonaventure out of the way we'll be able to set a good big mizzen which really will drive the ship. I don't think we can do much more to her, except to fill in the spaces between the masts with some sails set on the stays. They'd be bound, you'd think, to set better than square sails on a wind. We'll try some, anyway, and see. Now that's enough talk, Mr. Mate. We'll get to work — and you can begin by sending down that foretopsail yard and striking the topmast."

I will not weary you by telling in detail about the metamorphosis of the *Heart's Content*. In spite of the doubts and grumbling of the hands, the work got done at last. It was, after all, just plain sailorizing which any rigger or sailmarker could easily do, and the only really difficult task was the forcing of that crowd of sailormen to do something which no sailor had ever had the sense, faith or courage to try before.

When the job was done the crew of the *Heart's Content* stood off and gazed at her; and they said (amongst other things) that she looked like nothing on earth; that she would never sail; and that if she did she was bound to drown them all in the first breeze of wind that came along. They added that it was now clear the Skipper was off his head and it was high time someone put a stopper on him before he was the death of the lot of them.

The drawing shows more or less what the ship looked like when Martin had finished with her. She certainly does seem rather queer; but, nevertheless, there are some points about her worthy of attention. It seems, for instance, that Martin Fothergill's fore-and-aft sails should be just as effective as those which we set on our racing schooners today. Their cut and material, of course, were poor, but otherwise they smack of 1926 rather than 1630. And it may be also, if only her owner felt moved to try it, that the *Advance*, say, might run down wind a good deal faster under the *Heart's Content's* sail plan than she does now under her own. However that may be, it is certain that when Martin Fothergill had worked his works upon her the *Heart's Content* was a very long way indeed ahead of her time. And when Martin looked at his transformed ship he saw that his work was good.

"There's only one more change to make," said Martin. "We'll give the ship a new name, for the old *Content* is dead. So get a brush, Mr. Mate, and paint *Progress* in great big letters right across her stern — and on both bows, too, by gum! so that everyone may see what's coming."

And that same night while Martin slept, some conservative and cautious souls stirred up those imaginative brains of his with a handspike and then cut his throat from ear to ear — just to make sure. Which seems a pity, because O'Hara and the rest re-rigged the *Heart's Content* in strict accordance with the best traditions of seamanship — and the world had to wait until 1925 A.D. before anyone developed enough imagination, faith and courage to break the chains of established custom and invent even such a simple affair, for instance, as the *Advance* staysail.

II

The schooner *Coromandel* was built in the year 1930 A.D. She was a typical ocean-cruising yacht of the period, with her tall Bermudian mainsail and a most efficient set of staysails between her masts. She was a fine, seaworthy vessel and very fast; but in spite of this her owner was far from being pleased with her. Her owner's name was Smith, and it was Smith's ambition to win the Bermuda Cup; but in the 1930 race, although he had driven the *Coromandel* hard night and day, three other schooners had arrived off St. David's ahead of her.

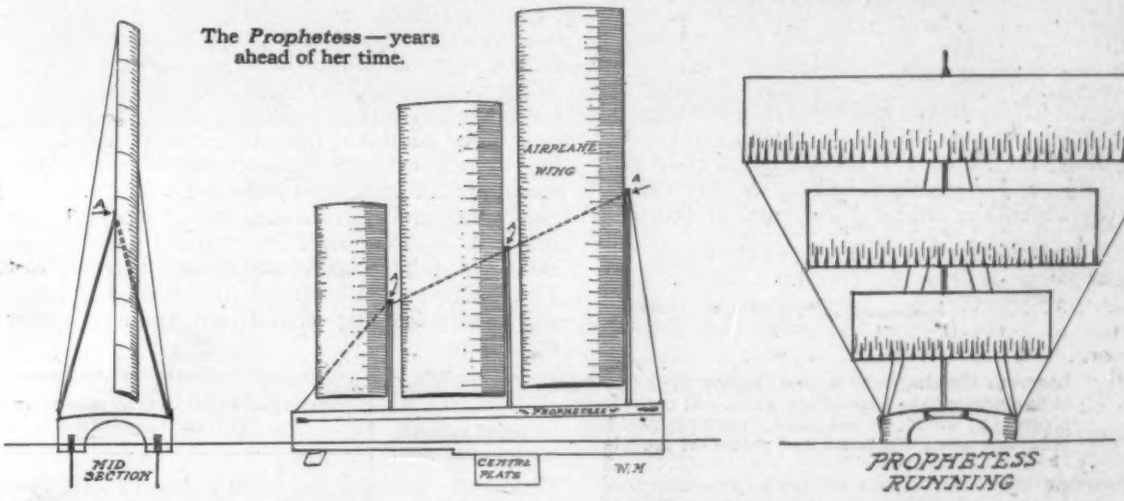
This Smith was blessed with a lively imagination, a high opinion of his own capabilities and the nerve to try anything once. Said he to himself, "I've got to pull off this race next year or bust. The *Coromandel* is as good as they make 'em, I guess, and if I get a new one built the chances are she won't be any faster. In fact, she might be slower. It's just a matter of chance. Design, construction and rig all seem to be pretty well stereotyped these days, and if I go to a designer and ask him to build me the fastest ocean racer afloat, it's a sure thing he'll turn me out a craft so like the best existing boats that it stands to reason, bar a big stroke of luck, there'll be some of them that are still going to beat her. I'm beginning to

think what's needed is to break clean away from all tradition and start fresh on some brand-new idea.

"If I were to try and work this thing out myself, I'd begin by clearing every preconceived idea out of my mind and then go to it — stark naked. For instance, I've got to forget about the present conventional types of sailing boat hulls. What I want is a form that can be more easily pushed through the water. And while I'm about it I might as well assume I also want something more effective than a canvas sail for the wind to push at. I doubt if I could invent these things myself; but, now I come to think of it, I don't have to worry — because the precise articles have been invented already!" A racing motor boat's hull *is* much more easily driven than the *Coromandel's*, and an aeroplane's wing *is* much more effective than a flapping canvas sail.

"Well, that sounds all right so far; but I can't go putting sails or aëroplane wings on a motor boat's hull, because it lacks stability and lateral resistance. However, it's no use telling myself what I can't do, for that doesn't help at all. What I *can* do is to fit a centre board — and an outrigger, like a catamaran's. Or, better still, use a second motor boat in place of the outrigger. That means twice as much to drive; but the thing's stability would be so great that she'd probably stand four times as much sail. I believe, by gum! there's more in this idea than meets the eye, and I've half a mind to have a go at it — and see."

The *Prophetess* — years ahead of her time.



So much for Smith's musings. They make it clear he had an imagination he was not afraid of. And it was his faith in himself and his readiness to take a chance which eventually caused him to sell the *Coromandel* and scandalize a respectable boat-builder by giving him an order for a sailing machine which looked something like the accompanying drawing.

I have drawn these pictures so beautifully that they seem to me to need little elucidation. However, perhaps I had better explain that the wings turn on pivots at "A." In the mid-section view the craft is on the port tack. In going about it is merely necessary to give the wings a half turn, windmill fashion, thus turning them end for end and getting them properly trimmed for the other tack. For running, the wings are given a quarter turn and their after edges dropped, whereby the craft is transformed into a square-rigger.

Smith was moved to christen his new craft the *Prophetess;* but, needless to say, he had a great many obstacles to surmount before he could get this child of his imagination built and in the water. Mechanical difficulties, of course, cropped up in their hundreds; but in these days it is nearly always possible to solve any purely mechanical problem with the aid of enough experts and dollars. And so it was not so much the mechanical snags as the hide-bound and inveterate conservatism of the builders which Smith found most difficult to overcome. As a result, the building of the *Prophetess* took much longer than Smith expected, and in the end he only just managed to get her fitted out on the day before the start of the Bermuda race.

To make matters worse, a flat calm prevailed on the Sound and Smith was forced to hire a launch to tow him to New London. He arrived off Sarah's Ledge on the morning of the start in a thick fog, and when he managed to locate the committee boat the Race Committee gave the *Prophetess* one look — and promptly rejected her entry.

"Very well," said Smith. "You can refuse to let me race; but you can't stop me sailing down to Bermuda and showing the world that the *Prophetess* is the fastest boat in the fleet. I'll do it, anyway."

The start of the 1931 Bermuda race was shrouded, as usual, in fog, so that the *Prophetess* was seen only for a moment as she crossed the starting line some fifteen minutes astern of the rest of the fleet. She was sailing fast, and she quickly slid away into the mist — and vanished. I wish you could have seen her as she fled out to sea. Hard on the wind, with a fair tide under her, she flashed past Montauk Point at 11½ knots; but it was not until the darkness fell and a fresh nor'westerly wind set in that the *Prophetess* really began to sail. She squared her wings to that fair breeze and lifted herself till she planed like a flying fish across the surface of the dancing waters. She seemed to fly; and indeed she must have almost flown, for, with the daylight, came a dash of spray as hot as blood across the Skipper's face, to show him that the *Prophetess* had reached the Stream already. As if in confirmation, a patch of typical Gulf Stream weather came down upon the boat, and for the next few hours she wrestled with a batch of black and furious squalls, hove-to, with her mizzen wing sheeted flat amidships and her fore and main wings stowed on deck. In the afternoon the weather eased, a wholesome steady breeze made out of the west sou'west, and with the wind abeam and a smooth sea the *Prophetess* began to show what she could do in the way of speed when she really laid herself down to it. For the next 12 hours she averaged 14 knots; but when the wind freshened and came away with a deal more heart to it, then the boat picked herself up and slid along at over 20 knots.

At noon, on the second day out from New London, Smith took an observation. The horizon was hazy and

(*Continued on page 118*)

Footing Versus Pointing in an Ocean Race

A Discussion of a Problem That Every Long Distance Racing Skipper Has To Consider

By ALEXANDER FORBES

RETURNING last fall from Europe, where no news of the Bermuda Race had penetrated, I seized eagerly on the August and September numbers of YACHTING, which I found on my desk, and read all they contained on the last race. The controversy over the handling of some of the contestants reminded me of certain considerations, both theoretical and practical, which had occupied my thoughts a good deal before I started on the Bermuda Race of 1924.

How close does it pay to point a boat when the wind is ahead or nearly so? and will the answer be just the same in an ocean race lasting several days as in a race sailed in a single afternoon? I believe that the answer is not the same in the two cases, and that in each case the question is capable of a simple mathematical treatment which, with liberal reservations and common sense, may be helpful.

On an ordinary afternoon race with a beat to windward lasting an hour or two, the probability is strong, on the average day, that the wind will hold approximately the same during the entire windward leg. On a race lasting four or five days, the probability is equally strong that the wind will shift. Of course, a knowledge of prevailing winds will influence the problem, but let us take the extreme case in which the chances are equal of the wind

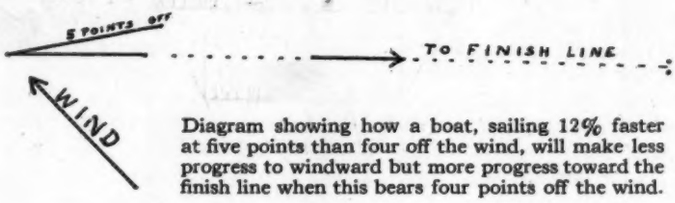


Diagram showing how a boat, sailing 12% faster at five points than four off the wind, will make less progress to windward but more progress toward the finish line when this bears four points off the wind.

blowing from any point of the compass. In that case the probability is that during the greater part of the race the boat can lay a course toward the finish line, for only one out of the four quadrants will involve beating. This difference in probabilities will make the answer to our question (how close to point) different in the two kinds of race, whenever the wind is not dead ahead. In the short race the paramount consideration is to make the greatest speed to windward; in the long race it is to make the greatest speed toward the finish line.

The difference can be illustrated by a simple case. Suppose the wind is S.W., and the finish line bears South. If the boat makes her best speed *to windward* by sailing four points off the wind, it will pay her in the short race to sail straight for the finish line, for if she bears off in order to foot faster, she will have to take another hitch to reach the line. But with the finish line hundreds of miles away and a probability of several different winds before it is reached, it will pay to keep off as long as the gain in speed through the water continues to increase the rate of approach to the finish line.

This may be expressed in terms of very simple mathematics. Take first the case of the short race, in which the desideratum is maximum speed to windward. Let V equal velocity through the water, and Θ the angle between the wind and the course steered: the problem is to make V cos Θ a maximum. For example, if a boat will sail more than 28 per cent faster five points than four points off the wind, she will make better progress to windward by so doing.

In the case of the long race, in which a probable change of wind is assumed, the problem becomes a little more complex. The treatment is similar, but the figures differ according to the bearing of the finish line with respect to the wind. As long as the finish line bears dead to windward the solution is exactly the same as in the case of the short race. When the finish line is not dead to windward, the same formula still applies, if we make θ stand for the angle between the boat's course and the course to the finish. The effect of increasing the divergence between the direction of the wind and the bearing of the finish is to increase the advantage of keeping off and driving the boat fast at the expense of pointing high.

For example, suppose a boat sails 12 per cent faster five points off the wind than four points off. If her course is dead to windward it will not pay her to sail five points off the wind for, as shown above, she must gain 28 per cent in speed to profit. If the finish line bears two points off the wind it will barely pay her, whereas if the finish line bears four points off the wind, it will most decidedly pay her to keep off to five points off the wind, and possibly more, for at five points off she is heading within a point of her course, and the rate of approach is 98 per cent of what it would be if she could sail straight on her course at the same speed. This last condition is illustrated in Figure 1. The following table shows just what increase in speed will justify keeping off different amounts under various conditions:

Pointing with respect to wind	Bearing of finish line, in points, away from direction of wind				
	0	1	2	3	
4½ points.....	11%	8%	5%	2.5%	0.5%
5 points.....	27%	18%	11%	7.3%	2.0%
6 points.....	85%	50%	31%	18.0%	8.0%

These points are illustrated, after a fashion, by the steering of the *Black Duck* in the Bermuda Race of 1924. During the last three days the wind varied from S.S.W. to S.W. by W. During the same time the bearing of the finish line varied from S. by E.¼E. to S.E. by S.½S. Nearly all of that time we kept sailing approximately six points off the wind, at which bearing she came fairly near her maximum speed through the water. Even when it took us to windward of our course we continued to steer within six points of the wind, although not in accord with the above principle, for the prevalence of S.W. wind and east-running current made us want to get as far to windward as we could without excessive loss of speed. But when our policy took us to leeward of our course, it illustrates my point. The *Black Duck* usually makes her best progress to windward sailing in about nine or ten points (*i.e.*, four and one-half or five off the wind), therefore to sail her six points off the wind would not have paid in a short race; but in the Bermuda Race it worked well, for it took us fast toward our destination, and the subsequent favoring of the wind enabled us to keep driving her on the starboard tack without pinching, till the reef was passed.

Photo by E. H. Lincoln

Marblehead Harbor in 1885, showing Tucker's Wharf in foreground, where the Boston Yacht Club now stands. Then, as now, dories were very much in evidence. The catboat is the *Nanepa Hemet*.

Small Boat Racing in New England to Reach High Water Mark this Season

Many New Classes Show the Rapid Growth in Yacht Racing

By William Upham Swan

THAT more than nine hundred small sail boats, mostly various types of one-design classes, will be raced by nearly sixty yacht clubs on the New England coast east of New London the coming summer, is the estimate made from a mid-winter survey of the plans of a large number of the leading clubs. As each boat will carry an average of something more than two persons, it will be seen that some two thousand persons will engage in active racing competition during the season and find surcease from traffic-choked highways, saturated golf courses and tennis courts. Nor does this take into account speed-boat racing at Onset, Cottage Park and Bar Harbor, nor the activities of the big fleets of the Eastern, Boston and New York Yacht Clubs, each of which will cruise for a week or more in these attractive waters, or the mighty squadrons which will gather at Marblehead, Marion, Edgartown and Bar Harbor for open race-week events. A high powered aëroplane which could sweep up the coast from the Thames to Frenchman's Bay any Saturday in July and August would look down on white canvas of racing sails in practically every available sheet of water as far east as Cape Ann, and in many of the Maine ports.

Starting at Groton, Conn., the aëronaut would see a new one-designed class of 15-footers encouraged by Vice Commodore Henry B. Plant, of the Seawanhaka-Corinthian Yacht Club, whose stone mansion on Branford Point is a well known landmark in the lower Sound. There will also be racing across at Hay Harbor on Fisher's Island, mostly by the children of the officers at Fort Wright. Stonington, the home of Capt. Nathaniel Palmer of Antarctic sealing fame, has crashed into the yachting picture in the past few years and early this season it is expected that the Stonington Yacht Club will be organized. A crew from the Wadawanok Country Club, headed by John Streeter, won the Rhode Island Junior championship last summer and will go to Larchmont for the Long Island championship this year.

A fine fleet of Herreshoff and Alden one-design boats has been racing in the shallow waters inside of Watch Hill beach for the past ten years. Eben B. Knowlton, of New York, and Ridley Watts, of Philadelphia, are the moving spirits in the racing at Watch Hill. Farther along the beach many Providence residents have summer places at Point Judith and nearly a score of the Cape Cod baby knockabouts, augmented by several new boats, will race below Wakefield the coming season.

The big small-boat event in Narragansett Bay the coming season will be the International Star Class championship, which Ben Comstock and Bill Gidley won last year. This event probably will be held off the north end of Prudence Island and the Star sailors in the six clubs in the association, with Secretary "Jeff" Davis, will help to manage the affair. Stars are sailed during the season at East Greenwich, Edgewood, Washington Park, and Pawtuxet, and smaller one-design classes at Bristol and Tiverton. The Warwick Country Club will have a fine

fleet of Herreshoff "S" boats and 12-footers the coming season and will try to stage a race for the 40-footers also. The Conanicut Yacht Club at Jamestown will also increase its one-design classes the coming summer.

An effort was made early in the winter to revive small-boat racing at Newport, which has seemingly passed out of the yachting picture, for its only nautical kick comes in the annual three-day's visit of the New York Yacht Club fleet, or a few week-end visitors of the cruising class. There is still hope for a small-boat racing fleet.

Running along shore, the aëronautical surveyor will see small-boat racing at Sakonnet, at Salter's Point and off Padanaram, while farther up Buzzard's Bay he will find a flock of German-built knockabouts hustling about old Mattapoisett harbor, and a grand fleet off the Beverly Yacht Club station at Marion. The Beverly Week for both large and small boats is now a fixture in Atlantic coast yacht racing. It comes early in August, half way between the Eastern and New York Y. C. cruises and the Larchmont and Marblehead weeks. Reliable breezes and unbounded hospitality make Beverly week compelling.

Across the Bay at Quissett one will find a fleet of 17 gaff-rigged 17-footers, which not being exactly the same, are accurately measured and raced with handicaps. Nearly half of the skippers at Quissett are women, one of the crews from here finishing as runner-up in the last Women's Championship.

A new yacht club has been formed at Waquoit, and will race a dozen Cape Cod baby knockabouts the coming summer, while in the nearby harbor of Cotuit a Mosquito fleet will sail over the oyster beds in Bigelow-built 14-foot dories.

Half of the Crosby 18-footers at Wianno will appear the coming season with Marconi rigs, which will mean a division in the class which sails frequently off East Bay during the season, while the juniors of the club disport themselves in dories and skiffs in the shallow waters of West Bay.

Across Nantucket Sound the Edgartown Yacht Club, with its new commodore, Elmer Jared Bliss, who won the Bermuda race in 1908, will have charge of the four classes, including the ten 15-footers which will enter their second season. The club will have an open race for Nantucket Sound boats in mid-August. Edgartown has awakened from its long dream of old whalemen and is now one of the most active yachting and fishing centers in south-eastern Massachusetts.

The well known Bay Bird class will again race in Pleasant Bay at Chatham, and "Clayt" Mayo and L. D. Baker are inspirers of racing at Orleans and Wellfleet, their respective native towns. Another old Cape Cod town that has become enthused over yacht racing is Barnstable, with the Pier Association in charge of affairs. The old harbor will see some fine sport the coming season.

Swinging up the coast one will find Bay Bird racing inside the bar at Plymouth, while across the bay at Duxbury is one of the largest, and certainly the pluckiest, lot of yachtsmen on the coast. With the harbor bereft of water for four hours on each tide, more than 70 yachts, in four classes, take advantage of nearly every full tide so that today Duxbury stands second only to Marblehead in small-boat racing, while its boys have three times won the Sears Cup at Marblehead.

The Scituate Yacht Club will start a new one-design class this year which brings the fleet up to 25 racing boats in three classes. The class of 17-footers, now all jib-headed rigged, leads the Cohasset Yacht Club fleet in racing interest, followed by a flock of "O" boats, Cape Cod knockabouts and a few punts. The fourth Massachusetts Women's Sailing Championship will be held on Labor Day week at Cohasset for the Mrs. Charles Francis Adams cup, now held by a Cohasset crew.

Members of the Hingham Yacht Club purchased eight "O" boats from the South Boston Yacht Club this winter and with the local Mighty Mites, another Cape Cod Shipbuilding Company production, will have intensive racing in Hull Bay this season.

Five other yacht clubs on the South Shore, the Wessegusset, King's Cove, Quincy, Wollaston and Squantum will race small boats during the season off their respective stations. The Squantum class of lapstrake Marconi knockabouts has been increased. In place of the "O" boats sold to Hingham, members of the South Boston Yacht Club have secured a dozen of the Crane 14-footers from Buzzard's Bay, and with the fast 18-foot class, a pre-war Boardman-design class, now all Marconi rigged, will hold races off City Point throughout the season.

North of The Cape

The fleet of Alden-designed 12-footers will again open the racing season in New England, in Charles River Basin, Boston, starting on April 9th. There will be three series, spring, summer and autumn, closing on November 26th. In addition there will be a regatta for the so-called A. B. C. knockdown boats for the Youth's Companion Cup (for the best built boat) and the Robert W. Emmons cup for the race. An outboard motor race for these boats, manned by youngsters, is also projected. Fifteen of these boats were building in Boston in January.

In Winthrop Bay members of the Cottage Park, Winthrop and Point Shirley yacht clubs are building a class of 14-footers to take the place of the nearly obsolete Hull "fifteens," another pre-war type.

The center of the Star Class activities north of Cape Cod is off the station of the Nahant Dory Club. Two of the club's boats, the *Midge II*, a new boat, and the *Northern Light*, went to Cuba last month for the international races. The club will hold the second Massachusetts mixed-doubles championship on September 10th. Miss Harriet Ellison and Raymond Hunt, of Duxbury, won the first event last fall and secured a leg in the handsome King cup.

Marblehead Classes

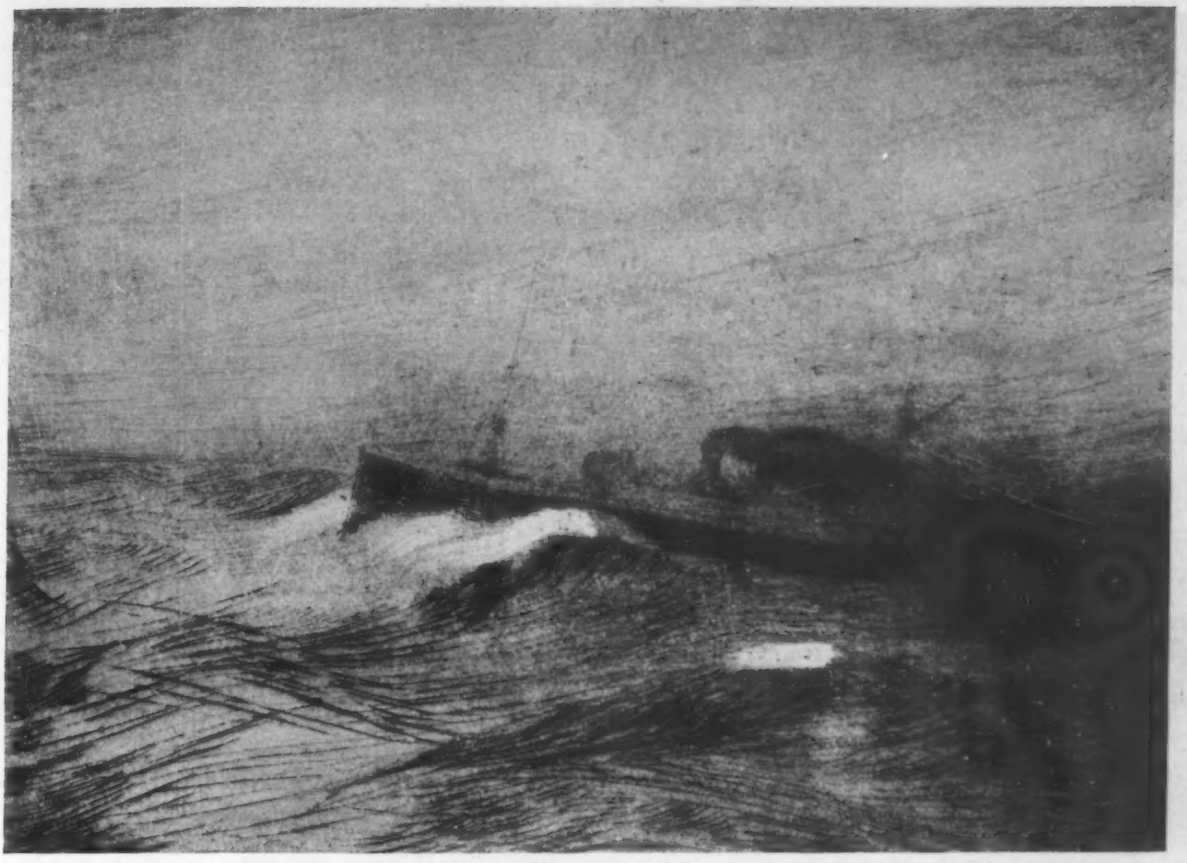
We have now arrived at Marblehead, the most active yacht racing port in the country, if not in the world, with seven one-design and four rating classes, totalling nearly 200 boats. The new boats in the rating classes are two "R's," building for Frank C. Paine from his own design, and for Rear Commodore Charles A. Welch 2nd, from the drawing board of L. Francis Herreshoff. The latter yacht will have many unique features including a double mainsail. Paine is tied with Adams with two wins each for the Class R Trophy and the fight between the new boat and the *Gossoon*, in which Adams won last year, will be a lively one. Paine will also place his *Gypsy* in commission with J. C. Gray, Jr., as skipper.

The Eastern Yacht Club cruise for major yachts such as the *Vanitie*, *Resolute* and *Vagrant*, the "Fifties," Forties, 10-metres and "Q's," as well as auxiliaries, will be held early in July, as usual. It is expected that the fleet will once more go to Maine. The Boston Yacht Club fleet will follow, but will probably head south this year and go through the canal.

The Manchester Yacht Club's fleet of 18's, 17's, 15's and dories will remain intact for another intensive season of racing inside of House Island.

One of the most progressive racing organizations is the Eastern Point Yacht Club, which now has a large majority of the old Sonder boats, notably the *Vim*, a Gardner boat and winner of the first international match

(*Continued on page 120*)



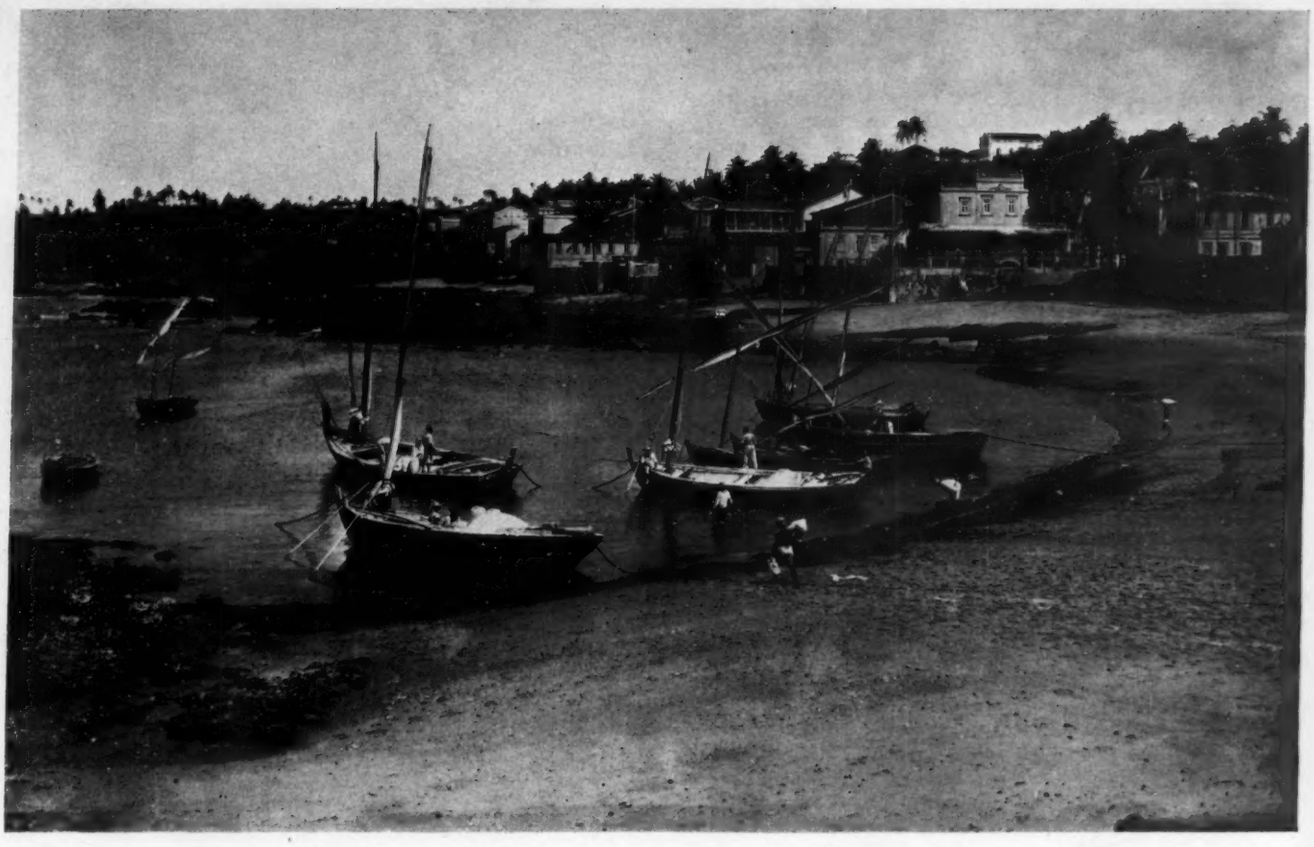
SOME ETCHINGS OF THE SEA

Above. The Roaring Forties.

From an etching by Frederic M. Gardiner, whose recent contribution to YACHTING on the voyage of the *Primrose IV* across the Atlantic will be recalled.

A Naples Brig.

By George Gale, a young New England artist who has done much of his work around old New Bedford.



Under the Southern Cross.

Above. Loading coffee into sailing lighters at Bahia, Brazil, just as it was done one hundred years ago.

At left. Sunset, Nictheroy, Brazil.

Your Propeller

A Short Talk for the Novice on a Subject in which He Is Vitally Interested

By Austin E. Potter

Part II — Types of Wheels for Various Uses

A PROPELLER is known either as a standard or a special, the former being of various types and shapes, and for the most part carried in stock, while the latter is usually manufactured to order, the patterns, drawings or specifications sometimes being supplied by the customer, but more often by the manufacturer, who has to be fully advised of just what conditions have to be met in service, with full and complete data as to the shape and size of the hull, the actual power and speed of the engine, and the speed that is hoped to be obtained in each individual case.

The first, and one of the most important things to know in a special design is the direction of rotation. The diameter and pitch having been decided upon, the amount of effective blade area not only must be decided, but its distribution as well. In order to insure a practically unimpeded flow of water it may be necessary to locate the widest part of the blade near its outer extremity, or it may be deemed advisable to narrow the tip of the blade and widen it at some predetermined lesser diameter. The entering edge preferably should be practically in line with the front face of the hub, or it may be considered advisable, under certain conditions, to have this edge rake or slant rearward in order to render the picking up of grass, ropes and cables less likely, or for some other well-defined reason.

While such special designing is of frequent occurrence, stock types are regularly manufactured to meet usual rather than unusual conditions, and manufacturers prefer to sell stock models rather than the higher priced specials.

Fully tried out and regularly produced standard propellers, to my mind, should always be selected if possible, even if at a slight loss of efficiency, for the reason that a special propeller often is liable to be something of an experiment, and sometimes an expensive one.

Without doubt, the material best adapted for propellers is a hard and tough manganese bronze. The various metals comprising this alloyed material should be selected with the utmost care, be accurately proportioned, smelted according to most modern methods, thoroughly fluxed and fused into a homogeneous molten mass, and poured at the correct temperature into molds prepared by skilled molders.

This produces a uniform material which combines all the essential qualities which propeller material should possess, of at least 65,000 pounds per square inch tensile strength, 25 per cent elongation, 30,000 pounds per square inch elastic limit, with a regular and close grain and a metal that will take a mirror-like polish and be practically unaffected by the corrosive action of sea water.

The tensile strength is the maximum stress it will stand when pulled apart lengthwise before breaking; the elastic limit is the maximum amount of pull before elongation begins, and the elongation is the amount of stretch in two inches before breaking.

With these three physical characteristics very high, the resulting material necessarily must be strong and tough.

Such a material permits the design and construction of a light yet strong propeller with thin edges, one that will create a minimum of resistance and will neither bend easily, spring nor break.

If the important quality of withstanding the corrosive effect of sea water be added to the above, the effective life of a propeller should be a generation, barring accident, although I have known of propellers lasting hardly through a season from excessive corrosion, amply demonstrating the "penny wise and pound foolish" maxim, as well as fully proving that "the best is the cheapest."

I have selected for illustration and brief description several standard types of propellers suitable for various types of power craft. It will be noted that in the main these types vary in blade width and contour, the length of the hub being proportional to the width of the blade, as the maximum blade width bears a fixed ratio to the diameter. These different types are arranged progressively as to blade width and area.

In all but one of these illustrations the flat or driving surface is shown, such as the propeller would appear if one were to stand astern of a boat to the right, and observe the mounted propeller. They are all right-hand propellers, and of three blades.

The type shown in Fig. 5 has a maximum blade width of approximately 25 per cent of the diameter. This propeller is adapted for use in high-speed displacement boats and light runabouts where it is possible and practicable to use large diameter and low pitch ratio. They are often used also in boats of heavier construction with low-powered engines.

Fig. 6 follows the general contour and style of Fig. 5 except that the greatest blade width is about 29 per cent of the diameter.

This type of propeller seems well adapted for boats

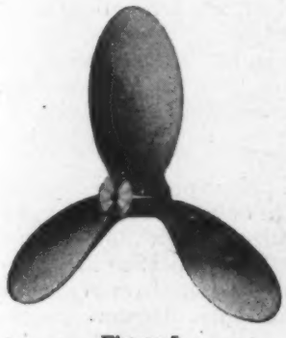


Figure 5.

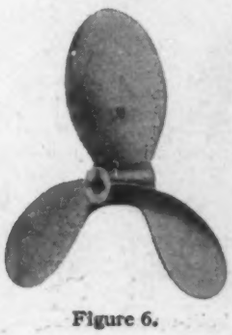


Figure 6.

Figure 7.

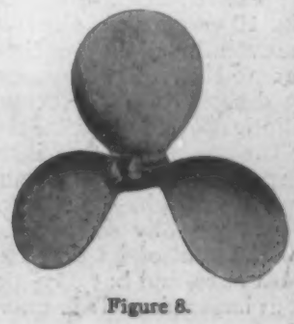


Figure 8.

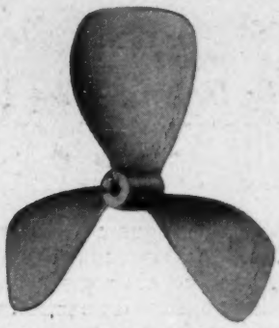


Figure 9. Towing Wheel.

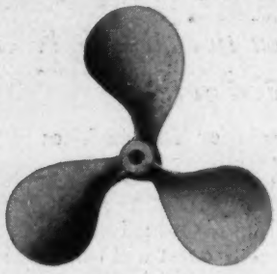


Figure 10. Low Speed Wheel.

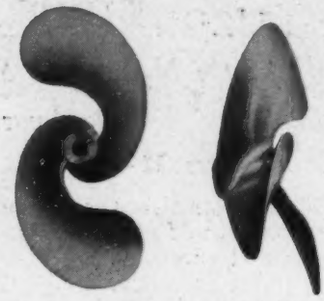


Figure 11. Two- and three-bladed weedless propeller.

Figure 13. Type of feathering wheel.

whose engine speed is in excess of 600 revolutions per minute. This class would include express and day cruisers, heavy runabouts, displacement racers, V-bottoms, etc.

This type of propeller is a popular one provided it is possible to swing a sufficiently large diameter wheel to insure a low pitch ratio.

Fig. 7 is similar to the two preceding illustrations except that it has some 33⅓ per cent blade width, instead of respectively 25 and 29 per cent.

This type is adapted for use in high-powered displacement boats, and is more of a racing type than either of the preceding. Its efficient speed range probably is from 600 to 1,400 revolutions per minute.

It has been employed satisfactorily in hydroplanes where a rather wide blade is necessary to secure initial "planing," without the drag that a wider blade might afterward cause.

Fig. 8 has a maximum blade width of some 40 per cent of the diameter. This type of propeller more nearly approaches the true turbine type than any other illustrated. In the larger sizes, and with considerably longer hubs, it was developed for marine turbine installations, more especially for use in connection with the Parsons type.

This type today is being more universally used than any other, and while it was recommended a few years ago for speeds not in excess of 800 revolutions per minute, with slight refinements of design and a better knowledge of pitch requirements and ratio, it has become beyond question the most universally used type for racing craft and boats equipped with high- as well as medium-speed engines. It is also used satisfactorily on boats of comparatively heavy construction, for which it was originally developed.

Fig. 9 is a type used for heavy work, towing, breasting heavy currents, rough water and stormy weather. It has some of the characteristics of design embodied in the previous illustrations and is essentially a low-speed propeller, with 33⅓ per cent greatest blade width.

Fig. 10 marks a definite step in the evolution of the propeller, intermediate between very early designs and the present or elliptical blade propeller era. Like the one in Fig. 9, it is for low speeds, causing vibration when run too high—on account of its abnormally wide blade, —40 per cent of its diameter in most sizes, and but 33⅓ per cent in larger sizes. It is essentially a power type, as its blade width is carried well out towards the tip of the blade.

Weedless propellers, Fig. 11, are illustrated in both two- and three-blade types.

For several years this type was manufactured in two-blade only, its production in three blades being considered an impossibility. However, since the 1926 New York Motor Boat Show a method of producing this type in three blades has been developed, and the results of many installations have proved it to be absolutely full weedless.

Boats engaged in the lobstering industry find this type an especially desirable one for work among floating buoys and warps.

This is the only type of propeller shown that is not true pitch its entire diameter. In designing this type it became necessary to sacrifice true pitch at the lesser diameters, in order to secure weedless characteristics.

Removable blade, or built-up propellers, are made only in the larger sizes, usually of the four-blade type, but sometimes with three blades. They may be not quite as efficient as solid propellers, due to the necessarily larger hub, but they possess advantages not found in the other type as an injured or lost blade can be replaced and the pitch can be adjusted, either increased or decreased, but of course at a loss of efficiency if set at other than true pitch.

Users of this type of propellers universally recommend them, and claim that the abnormal growths of grass and barnacles appearing on the hubs, when docked, while the blades are polished bright, seems to prove that the larger hub does not materially cause resistance loss. In certain cases propellers have been covered with vaseline before closely competitive races, and when docked subsequent thereto the vaseline has been found adhering to the hub and the root of the blades, while there was none remaining on the outer ends, demonstrating that the outer end of the blade does most of the work.

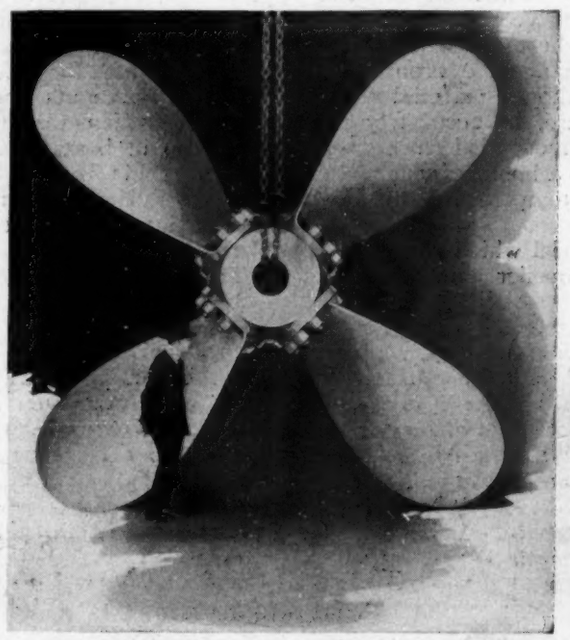


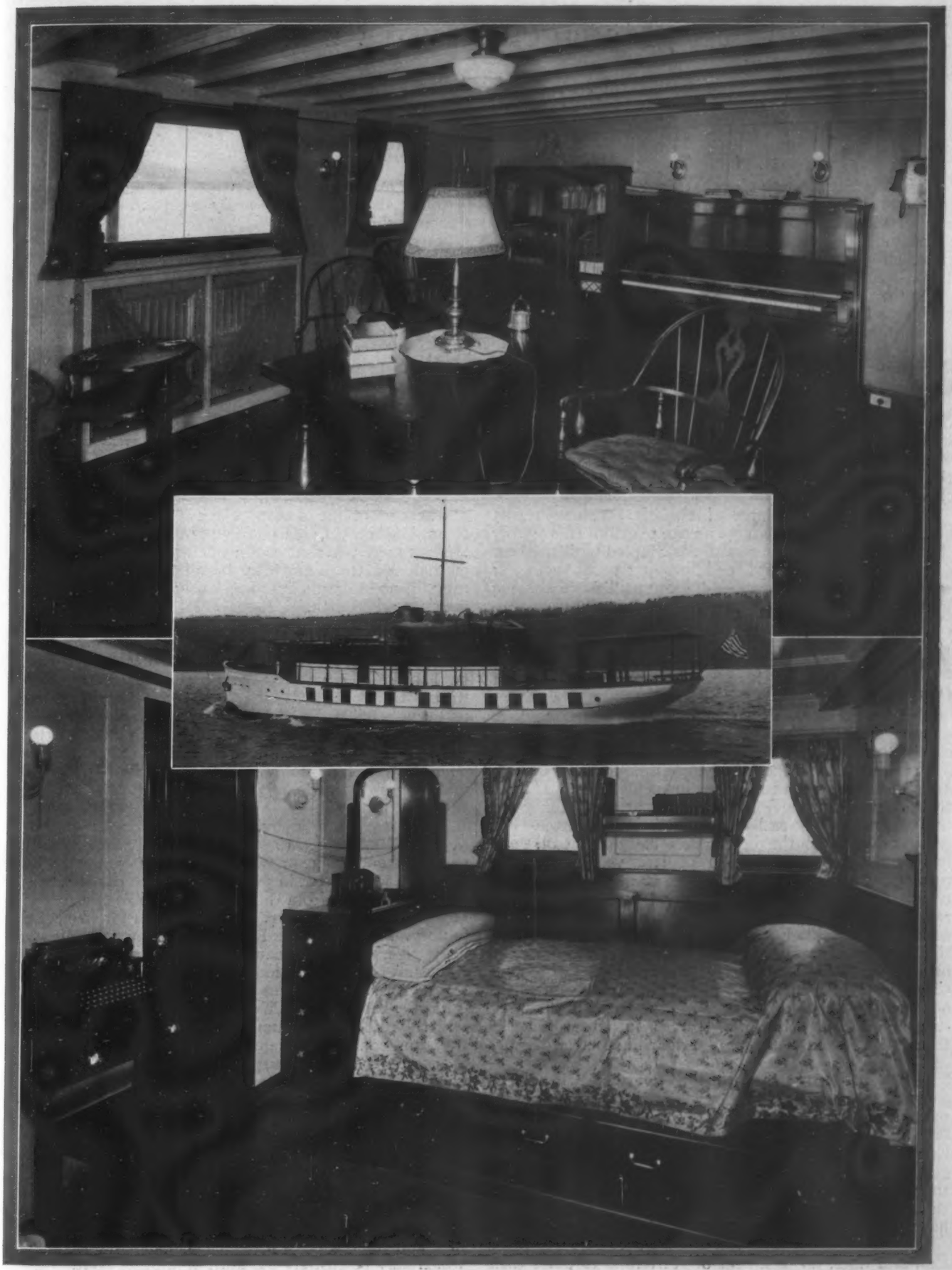
Figure 12, Large four-bladed built-up propeller.

Fig. 12 illustrates a large four-blade built-up propeller weighing 22,000 pounds. It is 17 feet 6 inches diameter, with 17-foot pitch.

Surface propellers, types that have only the lower part of the blades in the water, such as are used to propel Sea Sleds, do not greatly differ from regular elliptical types. However, such pro-

(*Continued on page 110*)

Bolo—A Houseboat Cruiser Owned by Charles M. Swift



Designed for coastwise as well as inland cruising, *Bolo*, a 95-foot power houseboat, shows the present trend toward a more seaworthy model in this type of yacht. A large deckhouse, with comfortable living and dining rooms, spacious quarters below and plenty of deck space, are the features. Cox & Stevens are the designers and two Winton motors of 125 h.p. furnish the power.

The Management of Regattas

Errors of Omission and Commission Often Noted — Some Pertinent Suggestions for the Better Management of Races

By WILLIAM W. SWAN

AT a recent meeting of the Yacht Racing Association of Long Island Sound, Mr. Stephens, its recorder, made an interesting and comprehensive report, embodying his observations of the racing under the jurisdiction of the Association during the season of 1926.

He then went on to enumerate the various items under his special field of activity, such as the work of the Association in getting out the valuable racing lists, entry blanks, booklets, etc. He reported the Sound championship winners in their respective classes and made various helpful suggestions.

Under the heading "Race Management," he remarked that "the general standard of race management had improved of late years." Then he went on to say: "Even where a race committee starts out to do its work properly, the result is likely to be marred by lack of preparation or experience."

Now I propose to enlarge a bit on Mr. Stephens' report and suggest a remedy. I have no axe to grind. It is simply the result of my own observations coupled with the best suggestions I have heard for improving yacht racing. If we can improve the sport — make it still more alluring to the juniors and newcomers — we will have accomplished much.

Mr. Stephens' mild assertion that "it happens only too frequently that there is no recall signal aboard the committee boat, or if there is one, there is no means of setting it promptly," is only too true, but why not go farther and tell other troubles of the racing man which a competent and smooth-working committee could eliminate?

I realize that it is not always possible for each club to appoint capable men to these responsible positions. Take the situation in one well-known yacht club: for years they have had a really experienced committee. For reasons over which the organization had no control, there has been internal dissension of late years, with the result that a new Commodore and Race Committee are trying to carry on. The older men have asked to be relieved for various reasons, and the chairman of the committee and his helpers are all new to the job. With the help of one or two of the "old timers" (who, at the beginning of each season, say, "I'm through. I'm too old to give it the time. You will have to get on without me" — but — who are always around making suggestions and "bossing" things in spite of their threats), this committee carried their burdens admirably last summer.

It was, therefore, a surprise to everyone when races were not well handled by clubs which *did* have committees made up of experienced yacht race handlers.

I am now going to enumerate some errors of commission, and omission, which I was in a peculiarly advantageous position to witness, not in a spirit of criticism other than to bring to light how the yachtsmen who have spent their good money and given of their limited time could have smoother running regattas.

One of the most annoying things a Race Committee can, and does, do to a fleet of starters is to place their committee boat so that the starting line is other than at a right angle to the direction of the first leg. This results in crowding at one end of the line, with its resultant danger of fouls, and a foul can easily result in the loss of a championship.

Let's admit that there are certain conditions where it would be hard for the committee to place their boat properly, as, for instance, tide running against wind. Still, under these conditions the committee boat could be anchored bow and stern.

Now witness the committee which started the various classes with a small wrist watch which, to say the least, was far from accurate. From the preparatory signal down to the Wee Scots, there was a constant variation of 5 to 6 seconds late with each gun. This was noted and checked by those who make a practice of timing each gun, but the skipper who only looks at or starts his watch with the preparatory for his own class was "out of luck." There were more than the usual number of recalls that day and in one case, in a class where the percentages were close at the end of the season, a recall may have lost the championship, through no fault of the skipper.

Then there was that committee which makes a holiday of their regatta. They may be all "good fellows," but they do not take their job seriously nor give the racing men a good regatta.

Then there is the Commodore who insists that the committee use his boat, but who cannot stay anchored all afternoon because he was unwise enough to ask guests on board and must give them a good time. He always "ups" the anchor as soon as the smallest class has started and cruises about the Sound, giving both the racers and his own committee heart failure for fear he won't turn back in time to be there for the finishes of some classes. This happens too often, and I hope all the past, present and future commodores will see this article and take it to heart.

There is also an annoying lack of judgment exhibited at times about when to start a race and what course to sail. I remember one or two instances last summer where a regatta was started in practically a dead calm, with the breeze coming in from the S.W. and visible to everyone, including the committee. The result was far from satisfactory. The Forties and O boats got away, with their lofty rigs, but the Seawanhaka schooners, Handicap classes, R boats and 30-footers had a terrible time dodging one another. In this case the committee added insult to injury by calmly disqualifying several boats on the "right of way" rule when the unfortunate craft had no steerageway, and couldn't even go about.

It seems to me that the practice of silently disqualifying a yacht at the start, or soon after, should be discontinued. One committee I know of leaves it to one man to watch for fouls. This man arbitrarily disqualifies boats which, in his judgment and from where he sits, are in the wrong. In some cases the boat is hailed immediately like this: "Number So-and-so, you are disqualified!" Wouldn't it be better to hail that boat thus: "Number So-and-so, please come on board committee boat at finish of race." The latter method allows the yacht to continue in the race and the owner to present his side of the argument, which may be entirely the fault of another boat.

A disqualification had to be reversed last summer after a hearing, but there were hard thoughts in the mind of

the man who was unnecessarily admonished. This high and mighty attitude, leaning toward no argument, no appeal or no hearing, is, the writer firmly believes, a mistake.

There was a case last summer where a boat was summarily disqualified by an *acting* committeeman. No appeal was allowed, although the owner went to the trouble of gathering several affidavits and writing to the committee requesting a hearing. No foul was committed in this case, but from where this man sat, and to two others in the boat with him, it *looked* as if there had been one.

It has seemed to the writer also that there is unnecessary hesitation on the part of various committees to reverse the courses. Several times last summer, if courses had been reversed, a better race, with a *real* windward leg, would have resulted. If it is the committee's idea just to run off the race and get it out of their minds, irrespective of whether the participants have a good race or not, why all right; but after all, isn't the committee there to give its fellow members and fellow yacht owners the best race possible under the conditions?

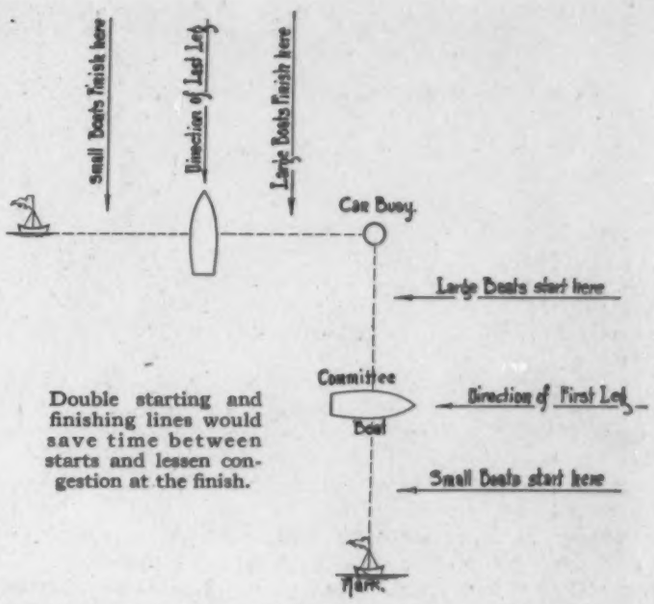
I wish to make a suggestion to eradicate these and other troubles. This suggestion has been made before, I believe, by the Long Island Sound Yacht Racing Association, but was turned down. It should be broached again and put through in the following (or a similar) form. We have an association. We now pay an entrance fee and have a recorder who is, in many cases (and in spite of the fact that he is experienced to the *n*th degree), treated as a guest by various committees. In other words, they ignore him. Why not increase those fees to a sufficient size to be able to reimburse an organized committee, with standard signals, standard watches and standard methods of running regattas? Or else a volunteer committee of seven men from various clubs in the Association.

Let the regular club committees function to the extent of furnishing a boat and the necessary assistance, but let the race be run by the Association Racing Committee alone, — courses, time of start, signals, times at finish — in other words, the mechanical part of regattas being entirely taken care of by men responsible to the L. I. S. Association, the regular club committee to take care of protests and the welfare of the racing fleet.

If this idea is worked out properly, along with Mr. Stephens' other suggestions, such as colored numbers properly placed for each class, the summaries will be finished more quickly, there will be no mistakes, averages can be computed each week for the owners or the press. We will know where we stand. The regattas will be standardized and will be run smoothly. The committees will be through sooner, with less responsibility, and the yachtsmen will be better served.

The weather conditions last summer were miserable, and we all sincerely hope they will never be repeated. This condition may have been responsible for what seemed like lack of judgment on the part of several committees. The wind, in a few cases, did not come in true until late in the afternoon. There is no way open for the shortening of courses in the instruction sheets of the majority of our Sound clubs except at those where the yachts are sent twice around a triangular course.

This could be taken care of by hoisting the "shorten course" signal, and thus notifying each class that it is to sail the next shorter course, if there is one. In other words, the 40-footers and O boats would sail the 30-foot course (if it is shorter). The 30-footers would sail the R class course. The R's would sail the 6-metre course, etc., down to a certain class, say, Star Class. As things were last summer, it would have given every one a better series of championship races if there had been a way of



Double starting and finishing lines would save time between starts and lessen congestion at the finish.

shortening courses and thus allowing the committee to delay the warning signal to 2:30 or even 3:00 P.M.

Going back to the Recorder's suggestion to vary the colors used in placing the numbers on the sails in the smaller classes, I could, in addition, suggest, I think, a good way to correctly take these times and get the summaries at the same time, which would not only help the committee finish its work with the crossing of the last boat, but would allow the representatives of the press to immediately tackle their stories and have them done by the time shore was reached.

It was my thought that should we ever be so lucky as to attain uniformly run regattas by the use of a trained team of officials, such as umpires in baseball and referees, etc., in football, that those officials would have at least two — three would be better — large-faced timing watches which could be synchronized with the one used to start the various classes. The entire list of entries could be kept on one or two large sheets as at present, but prior to the regatta the classes could be divided up into two — again three would be better — groups, with one man, his watch and sheet, to time designated classes *silently*.

If the finishes are liable to be close because of bunching just before the finish, he could have one man at his side silently marking the *number* and *order* of finish which could be then placed on the sheet during a breathing spell. If the boats in this class were coming in so fast that the timer could not look up from his watch, the assistant, at his elbow, could quietly repeat "mark" — "mark." At each "mark" the timer would put down the seconds, and the man calling "mark" the number of the yacht.

Example: Say one man has the 40-footers, the R Class and the Stars. Another the O class, the Victories and the Dories. The third man the Schooners, the 30-footers and the Interclubs. The handicap classes could be timed, corrected and entered by their own handicapper.

Now let's look at the third man's sheet. The Interclubs are finishing — closely bunched. He has his sheet, thumb-tacked on the board and his watch, fastened by an elastic lanyard to its top. As the boats cross, he simply puts down the time, thus: 4:40:57, 4:40:59, 4:41:08, etc. The man called to help in this emergency puts down, on another sheet, the numbers of the boats, thus: 8, 25, 4, etc. Then as soon as a respite occurs, the timer takes the sheet and enters the numbers, and the names, if he has the authentic

(*Continued on page 120*)

Monsoon, a West Coast schooner that has been very successful this year. She was designed by Edson B. Schock and is owned by Messrs. Ayres and Whiffen.

The Month in Yachting

Two International 6-Meter Races

THE Seawanhaka-Corinthian Yacht Club has received challenges from Norway and Holland for the two international small boat trophies now held by that club, the Seawanhaka Cup and the Gold Cup. Both events will be sailed with 6-meter boats.

To meet this foreign invasion no less than five new 6-meter yachts are being built for members of the Seawanhaka and Larchmont Yacht Clubs, bringing the total number of yachts built here to this international rule class up to 35, thus making it by far the largest open class in this country.

The Seawanhaka Cup, which was brought back to its old home on Oyster Bay in 1925 by Sherman Hoyt, who won it on the Clyde with the *Lanai*, can be raced for by only one challenger at a time, and the Norwegians are the ones who will sail for this coveted trophy, first put up for competition in 1895. The Scandinavian Gold Cup, an international challenge trophy, was won last year by the *Lanai*, in Norwegian waters, sailed by her young owner, Herman F. Whiton. Both Norway and Holland have challenged for this trophy and word has been received that Finland, and probably Sweden, will also send boats to represent those countries, so that the event will probably see five countries contending for this "mug." This is the first time, to the best of our recollection, that Holland has raced in this country.

Of the five American Sixes building, three are from designs by Clinton H. Crane, who turned out the successful *Lanai*. These are for Herman F. Whiton, Henry B. Plant and Johnston de Forest. Frederick M. Hoyt is designing one for Harold Tobey, of Larchmont, former owner of the Class O *Mirage*, and C. Sherman Hoyt is turning out a boat for himself and Henry L. Maxwell. All of the boats are building at Nevin's Yard, City Island. The races will be sailed off Oyster Bay in September.

Gretchen, winner of the New Year's Day regatta at San Diego.

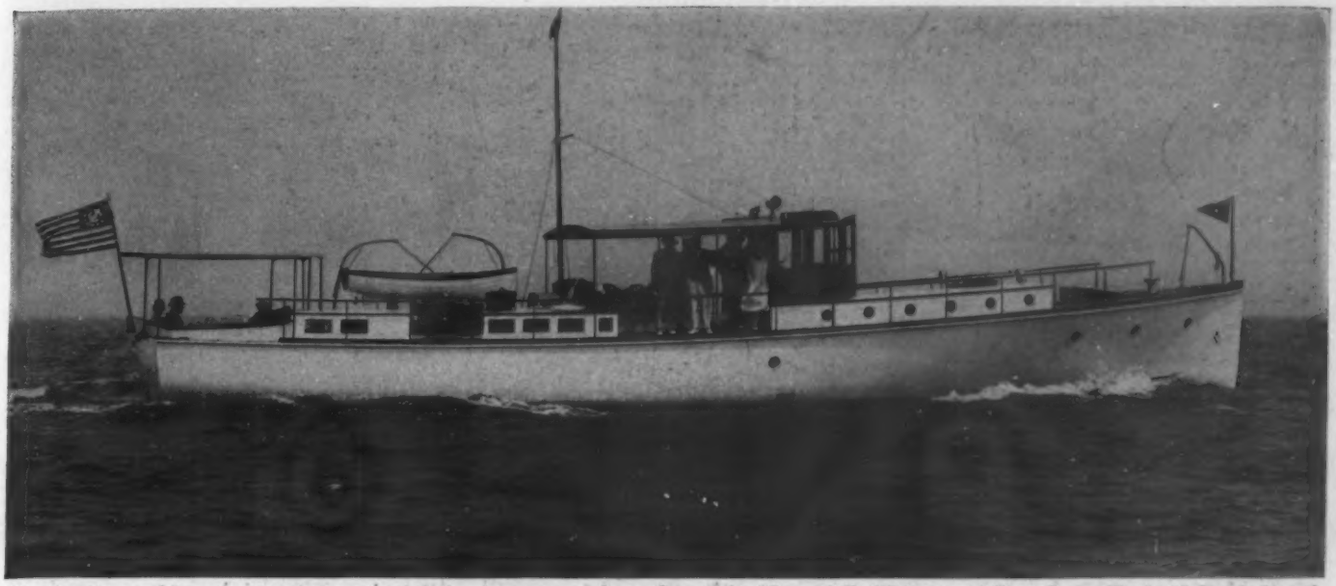
Big Entry List for the Corinthian Yacht Club's Ocean Race

THE ocean race of the Corinthian Yacht Club, of Philadelphia, is creating a lot of interest among blue water sailors as it is the only long distance race so far scheduled for this year. Already seventeen entries have been received and it looks as if there would be from twenty to twenty-five yachts starting from New London for Cape May on June 25th. The course for the race is from New London, around Montauk Point, and thence to a finish line off Cape May, a distance of 220 nautical miles. The conditions of the race are practically those of the Bermuda Race, the following classes being provided for:

Class A. Schooners, sloops, yawls and ketches, not over 70 feet and not under 53 feet over all measurement.

Class B. Schooners, sloops, yawls and ketches, not over 52 feet and not under 35 feet over all length.

Class C. Fisherman type, any rig, not over 70 feet and not under 35 feet over all length. Boats eligible for this class shall not have over 35 per cent of their ballast carried outside, and their design,



Muskeeta, **an able and somewhat unusual design in power cruisers. Owned by Howard F. Whitney, of Glen Cove. She is 68 feet in length and will make 24 miles per hour with two Sterling Coast Guard Motors. John G. Alden is the designer.**

construction, scantling and rigging shall conform to the general practice for yachts of this type.

Each yacht will be required to carry not less than four persons and the master or skipper, and the navigator, must be amateurs. The date for the start is June 25th, the day after the annual Yale-Harvard boat race on the Thames, the hour being 11:45 A.M., eastern standard time.

The following yachts have been entered:

YACHTS	RIG	OWNER
Minx	Sloop	William C. Atwater, Jr.
Quicksilver	Schooner	W. W. Watson
Black Goose	"	W. F. Downs
Sagamore	"	E. W. Madeira
Quita	"	G. Woodward
Savola	Yawl	W. S. Ellis
Surprise	Ketch	T. P. Hammer
Tigress	Schooner	S. P. Curtis
Tanya	Sloop	N. B. Kelly
Squaw	"	A. T. Baker
Malabar VIII	Schooner	John G. Alden
Harlequin	"	George Gallowhur
Malabar VII	"	Clarence L. Postley
Surprise	"	M. S. Kattenhorn
Northern Light	"	E. P. Bullard, Jr.
Alicia	"	Roderick Stephens
Filatonga	Yawl	J. Linton Rigg

Entries close on June 18th and should be made to George Woodward, Jr., Chairman, Ocean Race Committee, Corinthian Yacht Club, Essington, Pennsylvania.

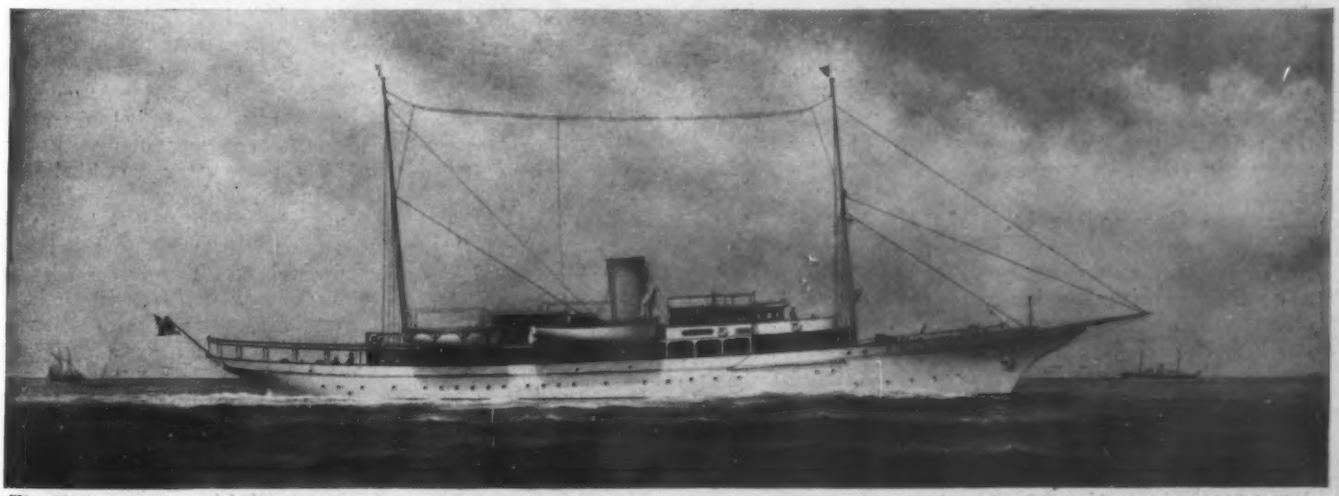
As this is the first race for many years that has been sailed from New York to the southward along the coast, it will give those who go a chance to get down to the Delaware and, possibly, through to the Chesapeake, either by way of the Delaware & Chesapeake Canal or by a run outside Cape Charles and up the bay to the canal.

New Year's Racing at San Diego

THE sailors of San Diego Bay usually make it a point to hold the first race of the year, and on January 1st, 1927, eighteen yachts, ranging from a 22-foot Sun boat to a 56-foot yawl, lined up for the starter's gun at this year's annual New Year's Day race. Of the 18 entries, 10 finished the race, the others dropping out on account of light wind — a condition not frequently met on the west coast.

Handicaps were based on a compilation of the results of the races during the summer and autumn months, each entrant being given a "past performances" rating according to her actual speed over different courses, and under varying conditions of wind. *Gretchen*, an open

(*Continued on page 127*)



The *Happy Days*, a new Diesel yacht whose clipper bow and short counter stern are somewhat of a relief from the conventional straight lines of standard practise. She is for I. C. Copley, of Aurora, Ill., from designs by Cox & Stevens, and will be launched in April.

Smiling Dan III, which won a leg on the Royal Poinciana trophy last year. Dick Loynes again has his flier at Palm Beach this year.

Palm Beach Opens the Racing Season in Florida

By GERRY SWINEHART

AS this issue of YACHTING goes to press the fliers from all sections of the United States are gathering at Palm Beach, and on February 21st the roaring, barking and plunging of the speedsters began in earnest over the Lake Worth course at the Fifth Annual Regatta.

When the estimable Father of Our Country, Brother George Washington of Mt. Vernon, Va., was about 190 years old, the skippers of the Palm Beach Yacht Club, in august assembly, decided one warm day in December that it might not be a bad idea to throw a regatta in his honor. And so the first annual Washington's Birthday Regatta of the Palm Beach Yacht Club was set afloat on the sea of yachting activities. Since then, the Palm Beach regatta has aged five years and has grown to be quite a youngster.

Things are happening fast in Palm Beach so far as speed boat racing is concerned. The water classic in its five years of existence has so laid hold on the residents of Palm Beach and West Palm Beach that this year they clamored for active participation in the event, urging the yachtsmen that a bigger and still better event be staged and that it take the form of a community-wide celebration. They — the folks — asked that the regatta be made the one really big event of the entire season.

And so Commodore D. H. Conkling appointed a committee of yachtsmen to join with a committee of other leading citizens in the incorporation of the Palm Beach Regatta Association. This organization is acting as sponsor of the regatta with Captain J. D. Hess as manager and with Commodores Conkling and Alfred H. Wagg serving in advisory capacities.

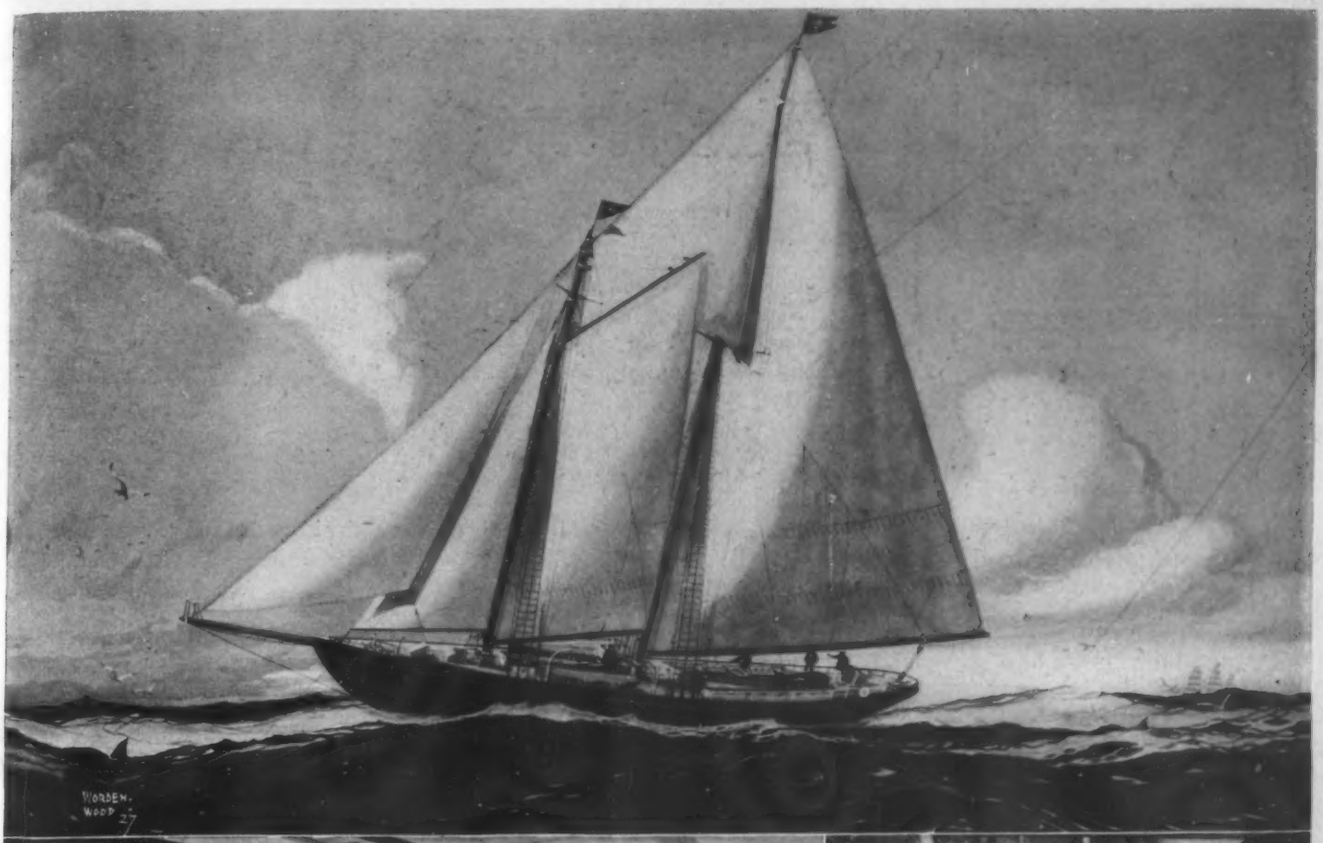
A couple of Commodores at Palm Beach. Alfred H. Wagg and D. H. Conkling of the Palm Beach Yacht Club.

The personnel of the association is as follows: J. D. Hess, Stafford B. Beach, George F. Bensel, Wm. McP. Bigelow, James K. Clarke, B. D. Cole, W. H. DaCamara, L. C. Holmes, Bruce Kitchell, Gayle McFadden, Andrew Nelson, Lynn S. Nichols, R. E. Oliver, Waldo Thompson, J. S. Willson, A. I. V. Wilson, W. J. Von Behren, A. S. Andersen, Leland Hatch, Mrs. Joe Earman, D. H. Conkling, A. H. Wagg, H. H. Curtis, H. S. Harvey, S. T. Lainhart, Bert Winters, B. J. Carlberg, Vincent Oaksmith, Max Sirkin, Hoyt LeMaster, Frank Hirsch, H. D. Knight, D. F. Dunkle, R. P. Paddison, Stanley Warrick, and W. J. Conners. But, of course, the regular Regatta Committee ran off the events as in the past.

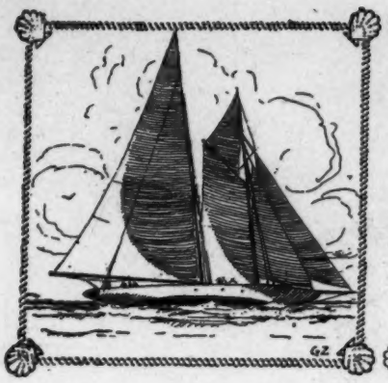
The dates set for this year's racing were February 20th, 21st, and 22nd. As usual, the regatta this year was under the sanction and rules of the Mississippi Valley Power Boat Association and the American Power Boat Association. Virtually every class of racing boat was scheduled on the program, although, of course, the little 151-class hydroplanes and the high-speed displacement boats held the center of the stage.

From indications received prior to the race, it looked as if the fastest boats from all parts of the country would be on hand. Dick Loynes, of Long Beach, Calif., who last year took the first leg on the Royal Poinciana Trophy with his *Smiling Dan III*, will again be on hand. Others who will take part in the racing are *Miss Spitfire VI*, owned by J. H. Rand, Jr., Harry A. Miller, E. W. Hammond, W. M. Waugh, W. McP. Bigelow, and many others of active racing fame. A full account of this regatta will appear in the next issue of YACHTING.

Blue Dolphin—An Off-Shore Cruising Auxiliary With Jib-Headed Rig



Blue Dolphin, owned by S. H. Velie, of Kansas City, is a fine example of the popular off-shore cruiser of the modified fisherman type. She is 90 feet long over all and was built last year from designs by W. J. Roué. Smart under sail, and with plenty of power furnished by a Bessemer Diesel engine, she has the room and comfort necessary for long cruises. Above are shown the main cabin, with built-in berths, and the engine room. Below, the galley and after stateroom.



Yachting

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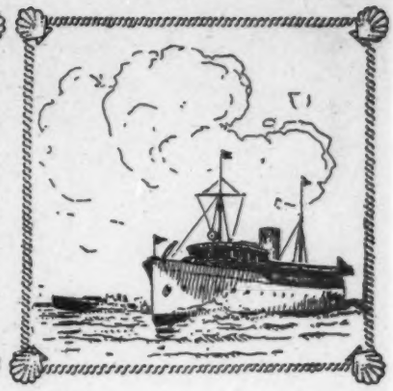


Editorial

"Merely a Boat"

SOME weeks ago Heywood Broun, writing in the *New York World*, made a slighting reference to the value of a boat that must have made all yachtsmen who read the article froth with anger. Evidently, Heywood was no sailor, nor did he know how every boat owner regards the object on which he bestows his affection and his dollars in equal proportions. But the famous columnist was tellingly rebuked by one Sam McCoy, a sailorman with feeling and a gift of expression, who came back with the following reply, which was also printed in the *World*. It so fittingly expresses a man's feeling for his boat, no matter the size, type, age or condition, that no apology is needed for reprinting it here. He writes:

"We (I feel sure I am speaking for thousands) don't want to rebuke you. But we are hurt. You have wounded us. Regretfully we must point out that you have been guilty of a lack of sensibility, a lack which we had never suspected in you. Listen:

"Did you or did you not print with relish that anecdote about the old priest who had slyly poked fun at the disciple Peter's sacrifice of his 'all' in order to become a disciple? The padre hinted that in sacrificing his 'all' Peter had made no great sacrifice, because that 'all' was merely a boat and a net.

"Merely a boat! Good God! Merely a boat!

"What's the matter with you, Heywood? Is it because you never owned a boat? Don't you know anything about the most beautiful thing ever fashioned by man? Don't you know — but it's no use! I just choke up. I get incoherent. I can't say anything about it, but there must be some articulate person among all of us who have known and fallen thrall to 'the loveliest thing that moves'! John Masefield, perhaps, who is here in New York today — But perhaps none of us can find words to argue with those too dull, too blind —

"And if one who owns a boat, a little thing with sails, must give it up — why, there isn't any sacrifice like that! You would know, if you ever stood, as I did once, on a rocky beach, bending against a howling southeaster and watching your boat — *your* boat — rising, falling, half buried in seas that made it impossible for you to get out to her, and slowly dragging her hook in the direction of the rocks that would surely crush her, and you watching helpless!

"You would know, if you ever sold your boat, as I did once, and for the last time, made everything snug on deck; flemished down, for the last time, every sheet and halliard, and, for the last time, rowed away from her, lying there so lightly and sweetly, her spars rocking gently, their reflection moving in the running tide — Darn you, you big dummy, aren't you blubbering by this time?

"And it must have been even worse for Peter. He had been a Gloucesterman, so to speak, all his life. He was born and bred to boats. They were his life, and part of him. Literally, his own boat and its gear of nets must have been his 'all.' When he gave up that boat of his he wrenched something out of his very soul. Something, perhaps, that no one who hasn't owned a boat could possibly understand. That's why we can forgive you, even if we are still saddened. To us, a man like Peter had made a sacrifice that outranks all others. No wonder it was he, and not any other of the disciples, who became the rock on which was built the church!"

The Motor Boat Show Reaches High Water Mark

The Motor Boat Show has come and gone. To those of us who have seen most of the shows of the past, the one that closed in New York January 29th seemed the best that has ever been held. Not only in the matter of the exhibits did it surpass any previous show, but the impression of interest on the part of the general public was more marked than ever before. This interest was manifest in more actual buying, or intention of buying, and in more intelligent observation and knowledge of things nautical. There were fewer casual sightseers who "did not know the difference between a bowline and an ash whip," and more persons who really knew something about boats and the water and evinced a genuine desire to own the one and get on the other as soon as possible. This is, we believe, an indication of great things to come in the sport.

As to the character of the exhibits themselves, they showed, for the most part, a distinct advance over previous years and a tendency towards greater adherence to the practical and to tried design. These exhibits are described in detail elsewhere in this issue.

The National Association of Engine and Boat Manufacturers is to be congratulated on the all 'round excellence of this year's show. It will go far towards making more persons anxious to make use of boats and the water for their recreation.

Time to Buy a Boat

To most yachtsmen the coming of March does not mean so much the near approach of spring as it does the advent of the season for "trading" in boats. As far back as the memory of the oldest seafarer extends, March, in the northern hemisphere, has always marked the buying season. With the swinging back of the sun the virus in the system begins to work and the desire to own a boat overshadows every other wish. Those who already own one want the pleasure of swapping her for something different, and those who don't, hustle to get the pick of what the early market affords.

Therefore, in order that all those who have the urge to become owner and master of their own craft may gratify this desire, we present in this March "For Sale" Issue of YACHTING the best offerings that are to be had. Look them over, pick out the likely ones, or the ones that suit your fancy, and then hot-foot it to the owner or broker and proceed to get busy. For the demand this year is great, the offerings all too few for those who want to get afloat, and it's first come, first served, with a vengeance.

In the World of Yachting

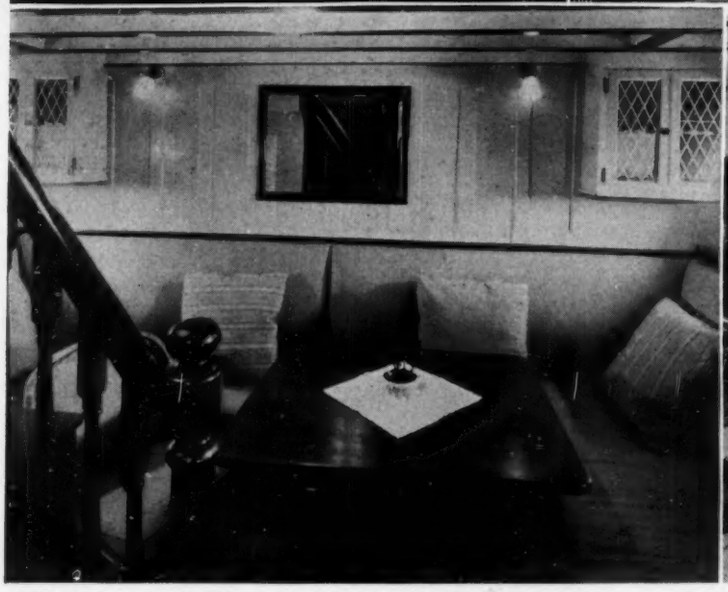
WINTHROP W. ALDRICH

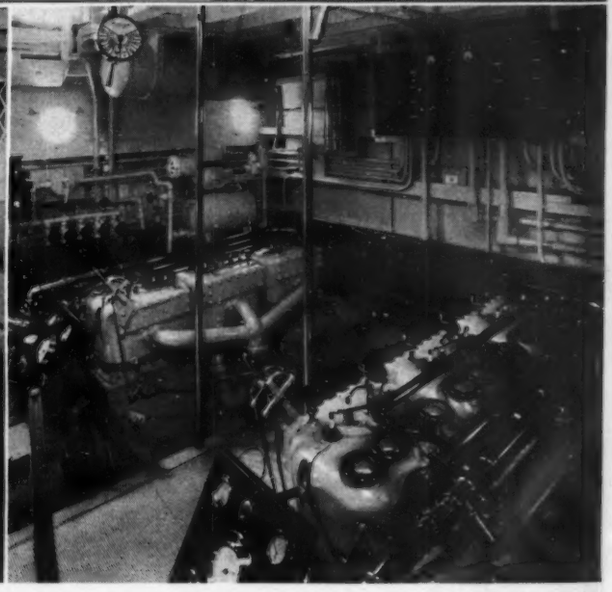
THE Rear Commodore of the New York Yacht Club, Winthrop W. Aldrich, has been sailing and racing yachts pretty much all his life, but it was not until he got the schooner "Flying Cloud" that he became prominent in the racing of large yachts.

Coming from a yachting family, his early experience was acquired on Narragansett Bay, mostly in small boats of the various classes raced there, and in the "Lady Mary," a Crowninshield sloop owned by his father, in which he did considerable cruising. Some five years ago he purchased the Gardner-designed schooner, "Flying Cloud," formerly the "Radiant," and has campaigned her hard since then, taking part in all of the cruises and races of the New York Yacht Club and several of the Eastern cruises. In 1924 he won the Astor Cup for schooners, and the following year he had the yacht re-rigged with a jib-headed mainsail. Recently he sold the "Flying Cloud" and now owns the Seawanhaka schooner "Nokomis."

He is now serving his third term as Rear Commodore of the New York Yacht Club. His other yacht clubs are the Eastern and the Seawanhaka-Corinthian.

Patricia II, A 72-Foot Coastwise Cruiser



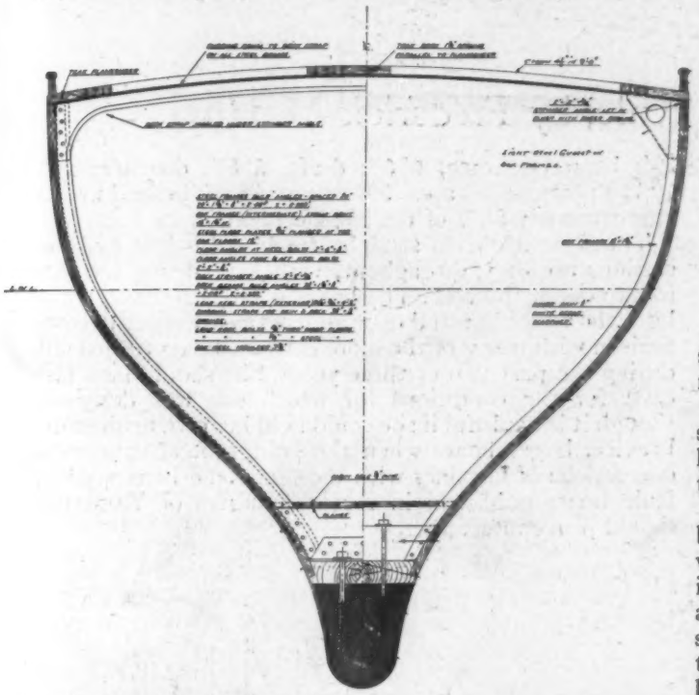


Patricia II **is an exceptionally well-designed power cruiser with an unusual deckhouse arrangement. Owned by Frederick B. Lovejoy, of New York, she was designed by John H. Wells and built by the George Lawley & Son Corporation. The interiors shown are the deckhouse saloon and the dining room below deck. Her speed is 15 knots with two Winton 7″ x 8″ motors.**

An Unusual Cruiser

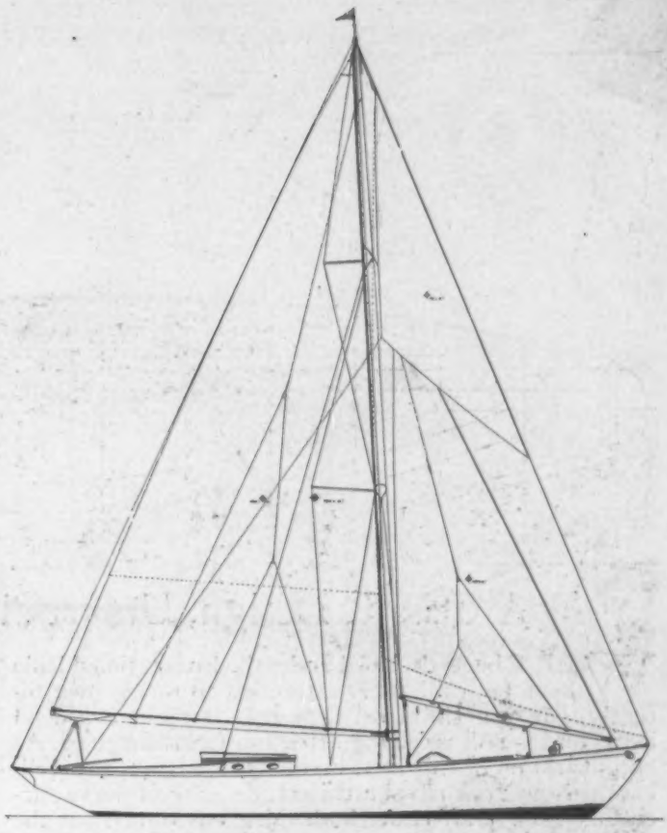
THE accompanying plans show an interesting and unusual type of cruising cutter designed by Burgess, Rigg & Morgan, Ltd., and now building at the Herreshoff Yard, Bristol, R. I., for Elihu Root, Jr., of New York City. The dimensions are: l.o.a. 41′ 6″; l.w.l. 32′; beam, 9′ 1″; draft, 6′; sail area, 800 sq. ft. The lead keel weighs 10,500 pounds, and the displacement figures out at 10.15 long tons.

Among the owner's requirements were: "The best possible small single-handed sea boat, with special reference to ability to windward in rough water and bad weather." The designers, after careful consideration of these and other requirements, decided to turn out a craft of long water line, rather short ends, reasonable beam, small wetted surface, and easy sections throughout. The sail area was definitely limited to 800 sq. ft., this being considered the maximum for single handed work. The lines show a slightly hollow entrance, long, easy run, and



long lateral plane. The rudder has been given a generous rake, and is carried almost to the water line, these and other features being incorporated for the sake of sure and steady steering in a following sea. The freeboard is generous, giving full headroom under the flush deck.

Under sail, the boat will be steered with a tiller, and in addition, for use when under power, a wheel will be in-

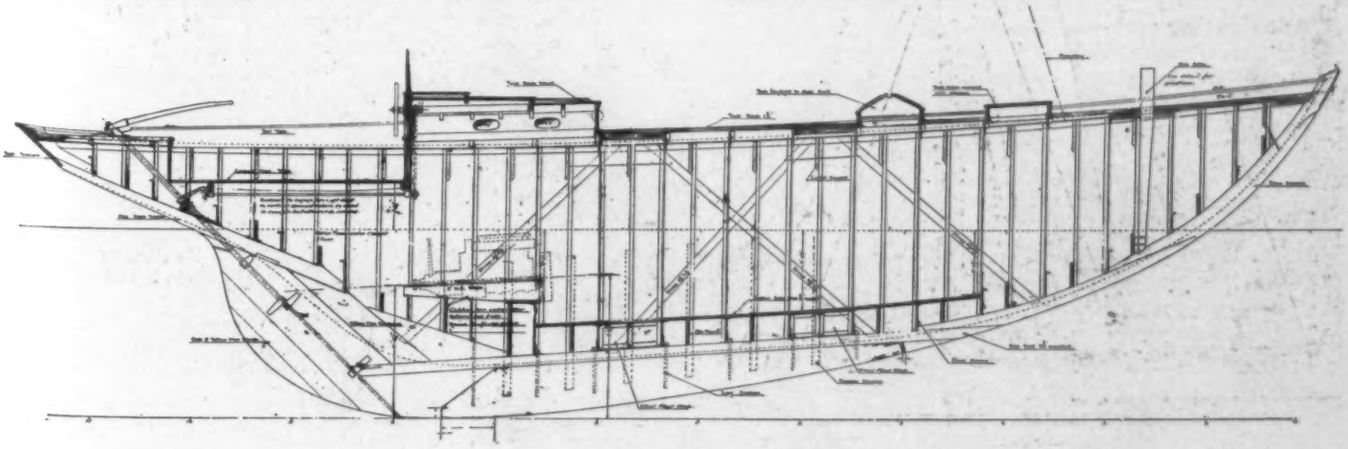


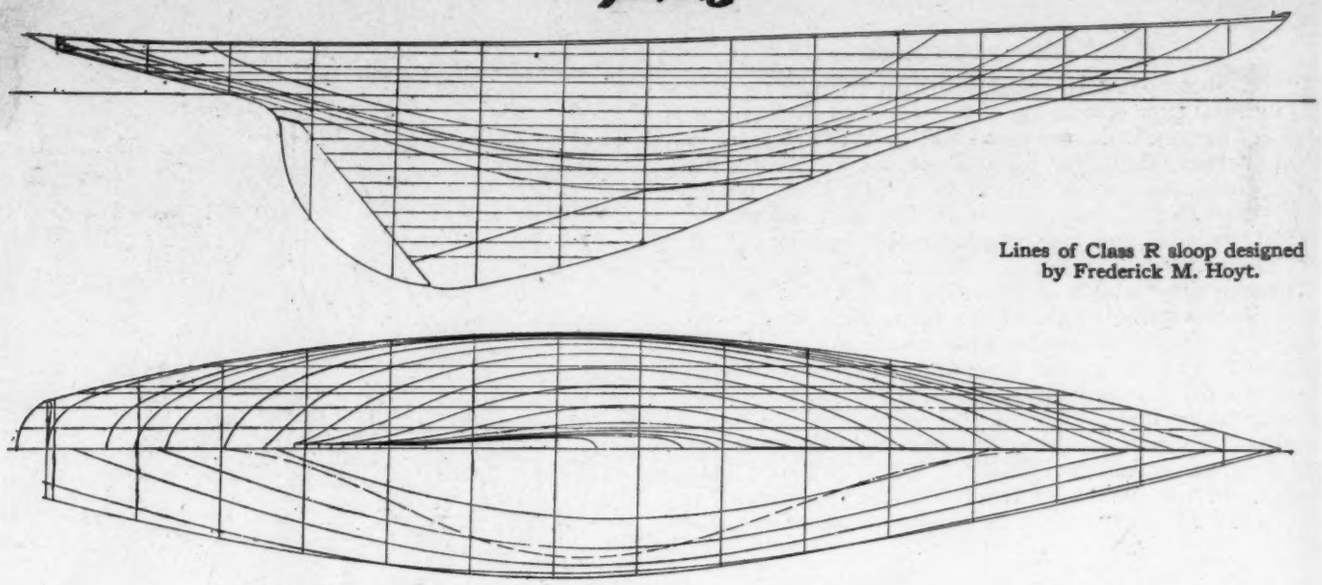
stalled at the forward end of the cockpit, engaging the rudder post through a horizontal shaft and clutch.

The mast is stepped well aft, cutter-fashion. The mainsail is small, with end of main boom inboard. The single headsail is large, and works on a traveler, with a jib topsail to help out in light going.

The construction is decidedly unusual, every effort being made to provide maximum strength and rigidity, with reasonable lightness and as little sacrifice of room inside as possible. The hull is double planked over bulb angle frames and beams, with decks of teak. The inner skin is of cedar, the outer skin of mahogany above the turn of the bilge and long leaf yellow pine below. The keel is attached by means of specially designed bronze lag screws, with extra heavy threads, and bronze straps let in flush with the planking outside. The deck is similarly strapped.

The details of the interior layout have not yet been decided upon, but the form of the boat assures very good accommodations for a fair-sized owner's party, and berths forward for a paid crew.



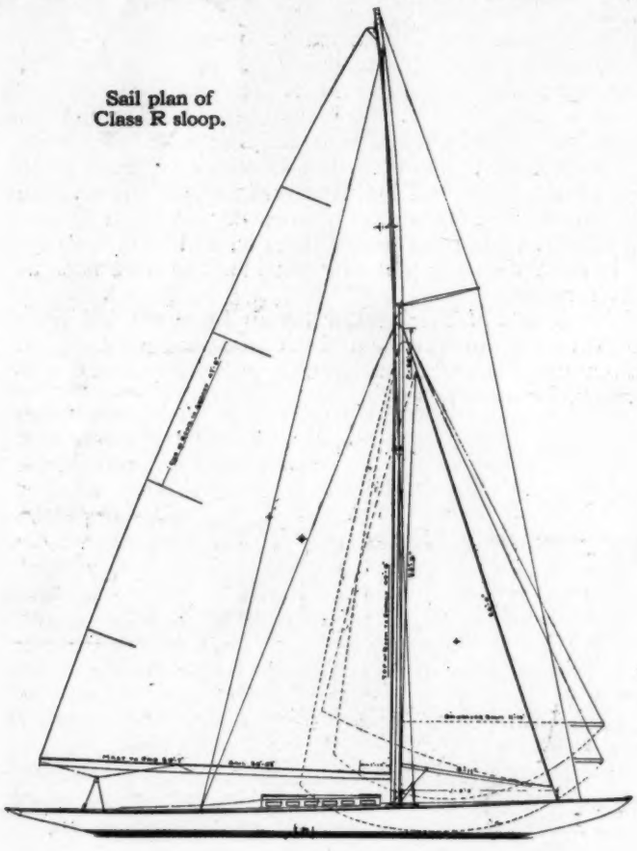


Lines of Class R sloop designed by Frederick M. Hoyt.

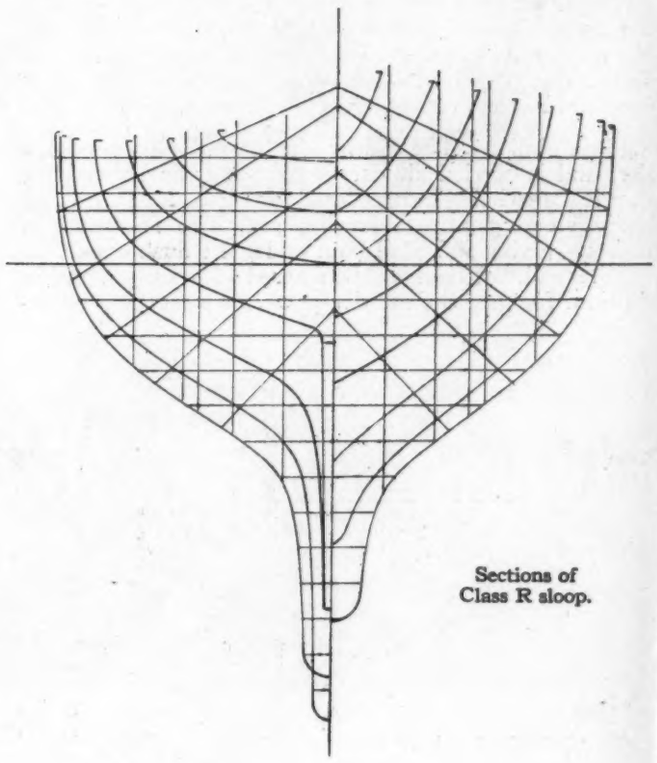
A Class R Design, Universal Rule, by Frederick M. Hoyt

WHILE boats designed under the International Rule have been a banner attraction to racing men recently, our own Universal Rule is by no means a dead issue, and is still receiving attention from designers. As an illustration of this fact, Frederick M. Hoyt, the well-known New York naval architect, designer of many successful racing craft under both rules, has turned out the accompanying attractive plans of a Class R boat, with the idea of creating a craft suited to the moderate weather usually encountered in Long Island Sound. She is a moderate boat in most respects, the principal dimensions being as follows: Length over all, 37′ 7″; length water line, 25′; beam, extreme, 6′ 6″; draft, 5′ 8″; displacement, 10,750 pounds; sail area, 594 square feet. The lead keel is approximately 58% of the displacement.

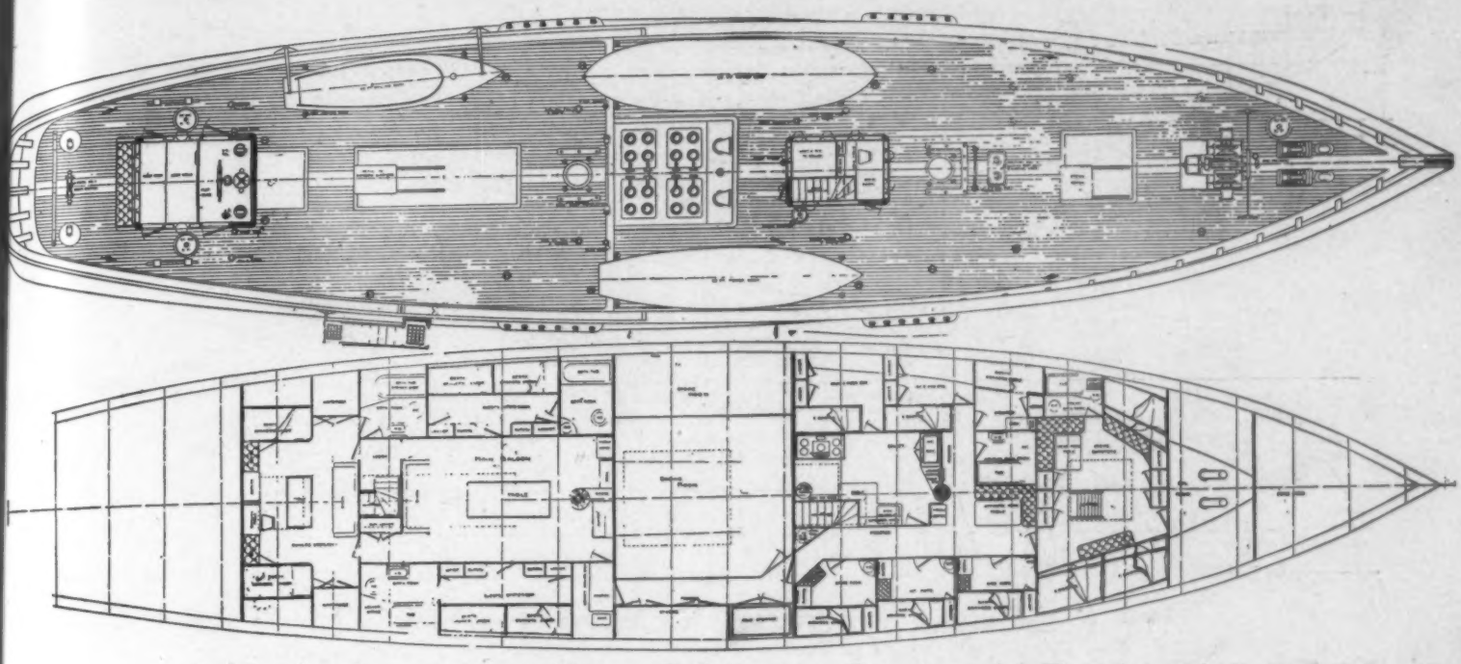
The sheer is almost straight, freeboard is low, and the sections are easy throughout, with a tendency towards roundness in the bow. The beam is fairly narrow, while both the water line and over all lengths are short in comparison with many of the more extreme boats turned out during the past two or three years. She should be a fast craft for the conditions for which she was designed, though it is doubtful if she could hold her own against the heavier, larger boats when the going got strenuous. A comparison of her lines with those of some International Rule boats published in recent numbers of YACHTING should prove interesting.



Sail plan of Class R sloop.



Sections of Class R sloop.

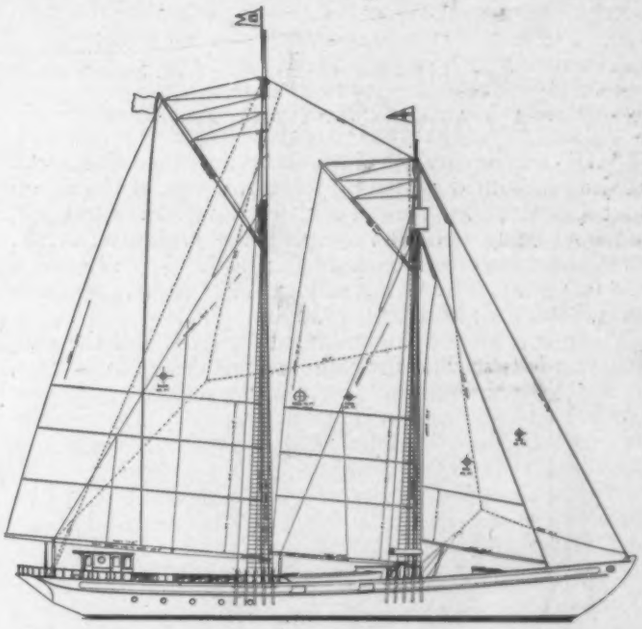


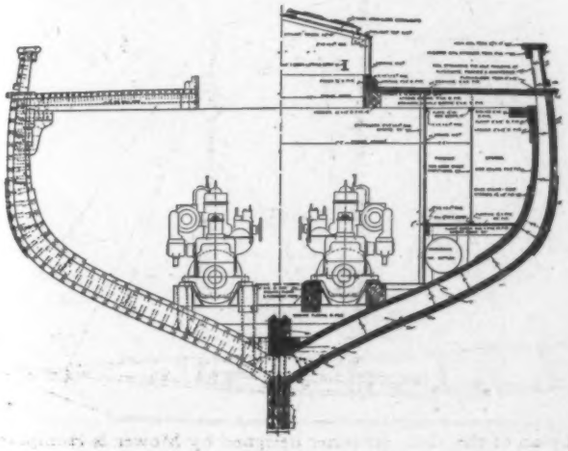
A Twin Screw Auxiliary Schooner for Arctic Exploration

WITH the arousing of interest in Arctic exploration by the numerous trips made recently to the Far North, the accompanying plans of the *Northern Light*, designed by Henry C. Grebe & Co., Inc., of Chicago, for Mr. John Borden, should prove of interest. She is a sturdily built, twin screw vessel, 140′ overall, 107′ water line, 30′ beam, and 15′ draft, with displacement of 312 tons. She was launched at the yard of her builders, W. F. Stone & Son, Oakland, Calif., late in January, and will set sail in May on what will be known as the Borden Field Museum Arctic Expedition.

Mr. Borden has had considerable seagoing experience, some in northern latitudes, and knows what a vessel for this service should be. The design follows fisherman practice, with raised quarter deck and topgallant rail aft. She has plenty of freeboard and sheer, ample beam, and considerable deadrise so that she will lift up if pinched in the ice. The construction throughout is unusually rugged, and an outside sheathing has been fitted for protection from ice. Stem and wood ends will be protected by galvanized iron stem band and plates.

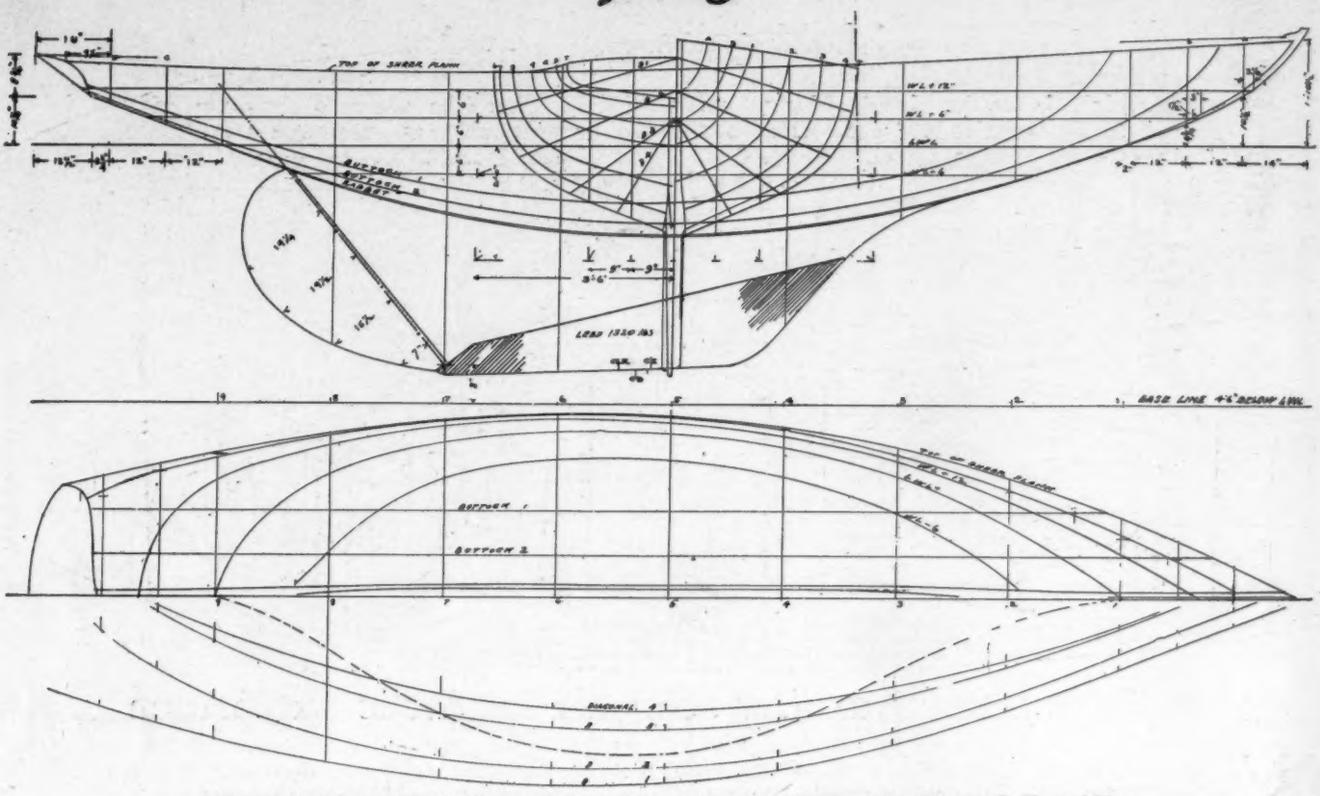
There are few erections on deck, it having been left clear for the stowage of lifeboats and tenders. Aft is a combined pilot house and chart room, containing also the engine controls, telegraphs, etc. Skylight trunks are over the owner's stateroom, main saloon and main companionway. The engine room skylight is of steel, and arranged to lift off for removal of engines. Forward is the radio house, and light and air shafts to galley and companion way.





The vessel is divided into five watertight compartments, consisting of forepeak, crew's quarters, engine room, owner's quarters and after peak. The owner's double stateroom is aft, the full width of the ship. Next forward is the main saloon, 14′ by 20′, with entrance from the deck on the port side. The galley and pantry are large and well arranged for service to the crew's messroom and owner's dining saloon. Separate staterooms are provided for first and second mates, wireless operator, engineers and cook. The forecastle has berths for six men.

The twin screw power plant consists of a pair of Fairbanks-Morse Diesel engines, of 120 h.p. each, which should drive the boat close to 10 miles an hour.

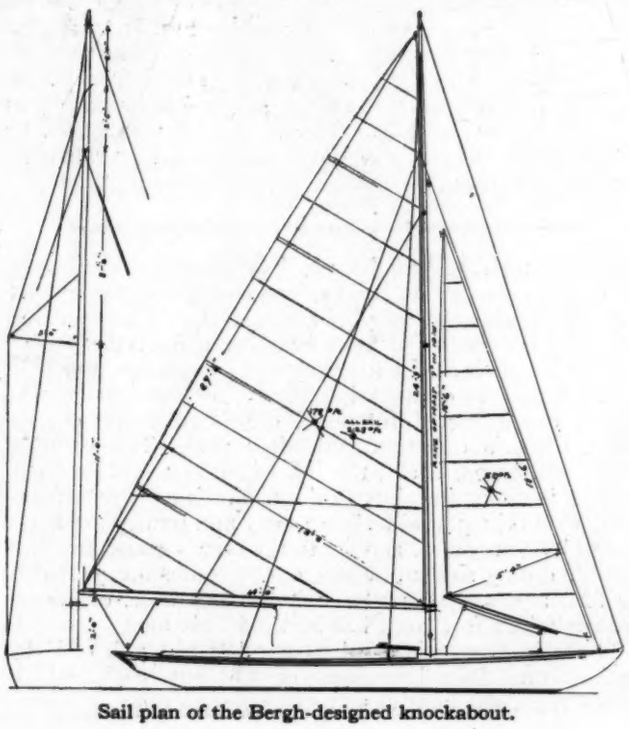


Lines and sections of the 22-ft. knockabout designed by John O. Bergh for Charles F. Tannehill.

An Attractive Knockabout

THE accompanying plans show an attractive small knockabout designed by John O. Bergh, of the Bergh Boat Corporation, New York, for Chas. F. Tannehill, and now being built for use on Lake Mahopac, N. Y. The dimensions are: l.o.a. 22 ft.; l.w.l. 15 ft.; beam, 6 ft. 8 in.; draft, 3 ft. 10 in.; sail area, 228 sq. ft.; displacement, 3500 lbs.; lead keel, 1320 lbs.

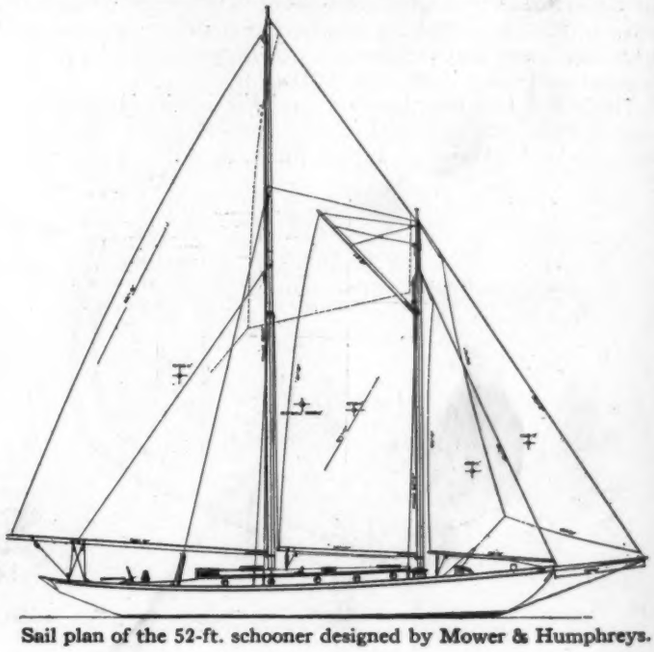
There is a watertight bulkhead forward, and the construction is first class throughout. The design looks fast, though the conditions on Lake Mahopac required a somewhat longer lateral plane than is usual. It is expected that this craft will be the forerunner of a number of the same kind of boats on the inland lakes.



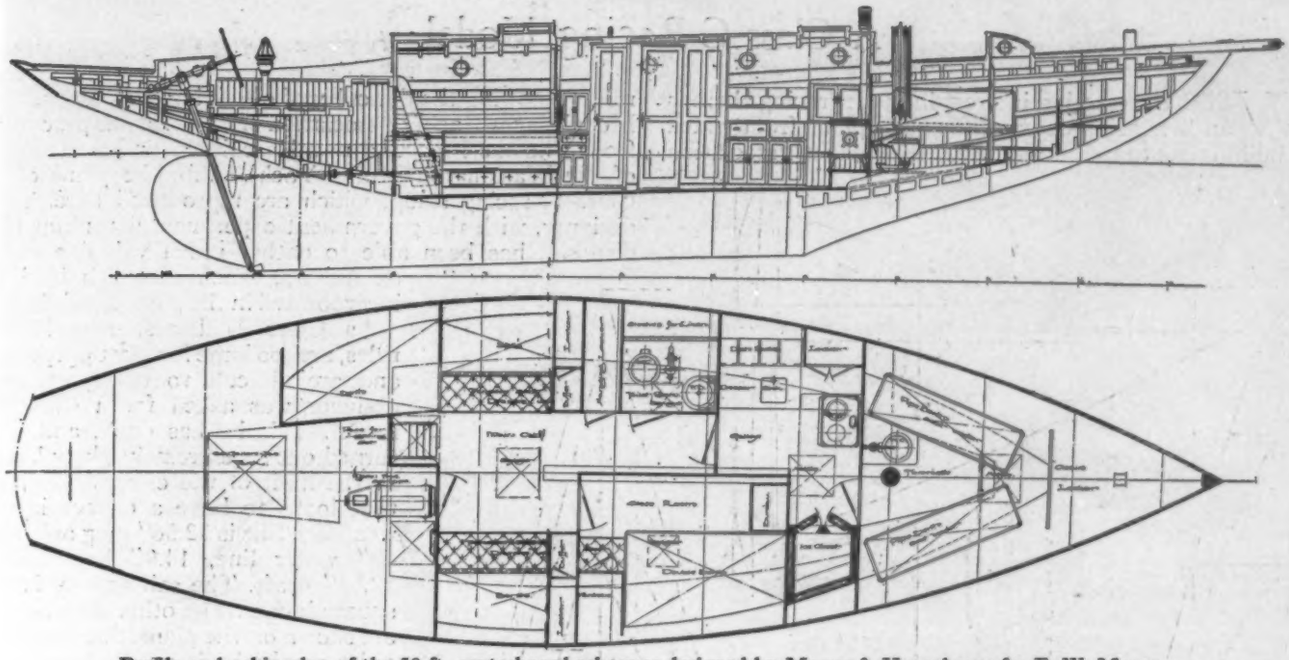
Sail plan of the Bergh-designed knockabout.

A 52-ft. Centerboard Auxiliary Schooner

THE accompanying plans from the office of Mower & Humphreys, Inc., show a seagoing centerboard schooner which is a modification of the well known schooner *Windjammer*, from the board of the same designers. The new boat is now under construction at the yard of Ernest H. Hartge, at Galesville, Md., for F. W.



Sail plan of the 52-ft. schooner designed by Mower & Humphreys.



Profile and cabin plan of the 52-ft. centerboard schooner designed by Mower & Humphreys for F. W. Moore.

Moore, of Baltimore. Her dimensions are: l.o.a. 52′; l.w.l. 37′6″; beam, 14′4″; draft, 4′10″; sail area of four lower sails, 1,335 sq. ft. The auxiliary power will be an F-4 Scripps, installed off center on the starboard side, and fitted with a Hyde feathering wheel. The speed under power should be around seven miles an hour.

While designed primarily for use on Chesapeake Bay, the owner wished a boat that would be an able offshore cruiser also. She is proportionally of greater draft than *Windjammer*, with more outside ballast, and is a typical Mower design, with nice sheer and well proportioned overhangs which are long enough to give good appearance and ample deck space, especially forward, without any sacrifice of seagoing qualities.

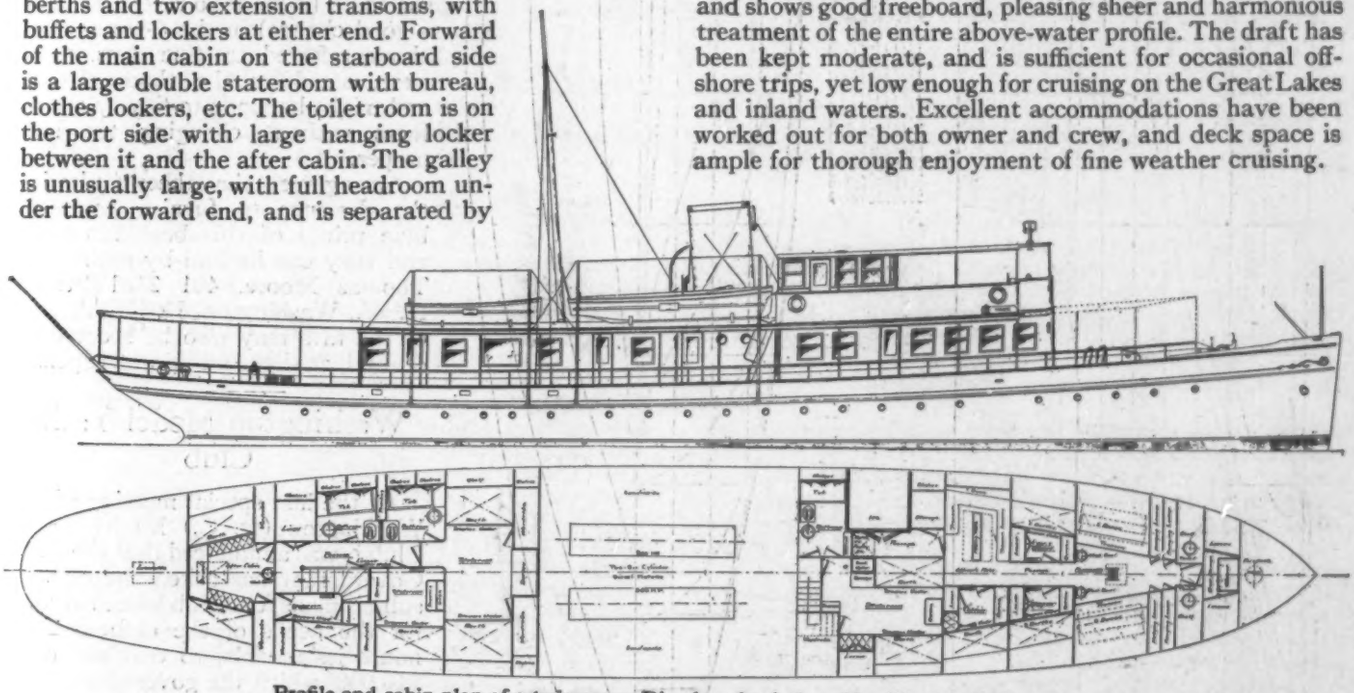
The cabin plan shows fine accommodations with many desirable features. The main cabin has three built-in berths and two extension transoms, with buffets and lockers at either end. Forward of the main cabin on the starboard side is a large double stateroom with bureau, clothes lockers, etc. The toilet room is on the port side with large hanging locker between it and the after cabin. The galley is unusually large, with full headroom under the forward end, and is separated by a bulkhead from the forecastle, which has two pipe berths and a toilet for the crew.

The schooner sail plan shows a conventional double head rig, and modern jib-headed mainsail of 675 sq. ft. area, with the end of the main boom within easy reach of the taffrail. A large fisherman's staysail will be a big help in average weather with lifted sheets.

A Twin Screw Diesel Yacht

THE plans below show a twin screw Diesel-powered yacht designed by Thomas D. Bowes, naval architect of Philadelphia, for a prominent Great Lakes yachtsman. The principal dimensions are: length over all, 125′6″; beam, 21′ 6″; draft, 8′ 6″.

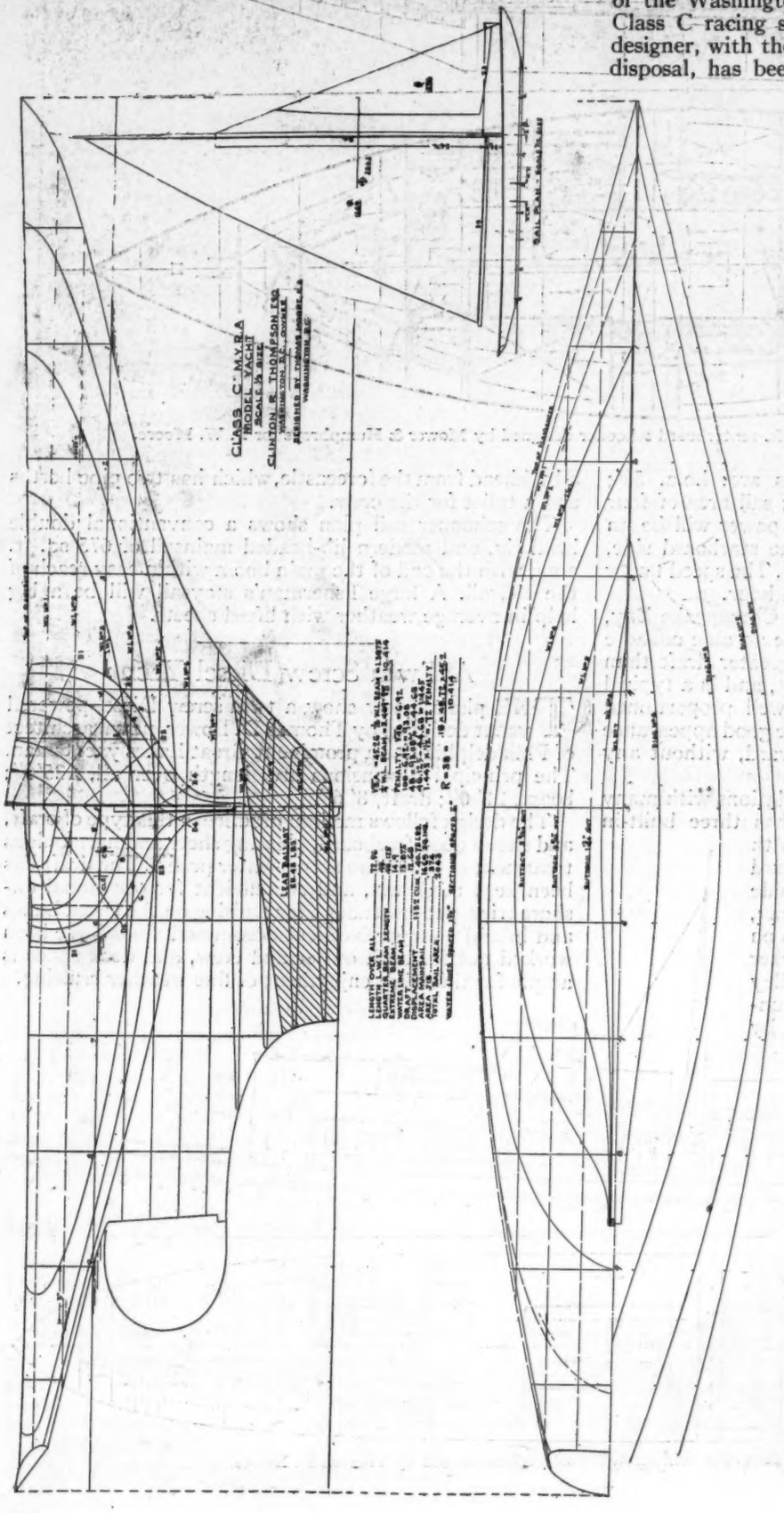
The design follows modern practice in this type of craft, and shows good freeboard, pleasing sheer and harmonious treatment of the entire above-water profile. The draft has been kept moderate, and is sufficient for occasional offshore trips, yet low enough for cruising on the Great Lakes and inland waters. Excellent accommodations have been worked out for both owner and crew, and deck space is ample for thorough enjoyment of fine weather cruising.



Profile and cabin plan of a twin screw Diesel yacht designed by Thomas D. Bowes.

A Class C Racing Model

WITH the growing interest in model racing there is an increasing demand for good plans from which to build boats to race under the Model Yacht Association rules. Knowing the difficulty of obtaining such plans, the Model Yacht Racing Association of America has procured from Thomas Moore, a naval architect, and a member of the Washington Model Yacht Club, the plans of a Class C racing sloop, which are reproduced here. The designer, with the government experimental tank at his disposal, has been able to gather much valuable data on models, much of which he has incorporated in the plans of this boat.



As Class B boats, Association rules, are too large for most purposes, and are difficult to transport, the designer was asked for a Class C model. This he has done, and has turned out an extremely likely boat, to the limit of the class, 38 rating, that looks to have a chance in all weathers. She is 72.56″ long over all, 48″ water line, 14.9″ beam, and 12.68″ draft. The sail area is 2,043 square inches. The other dimensions are shown on the plans. She does not quite go the limit on displacement, which is perhaps a good thing under the model rule. She takes a slight quarter beam penalty of .72″.

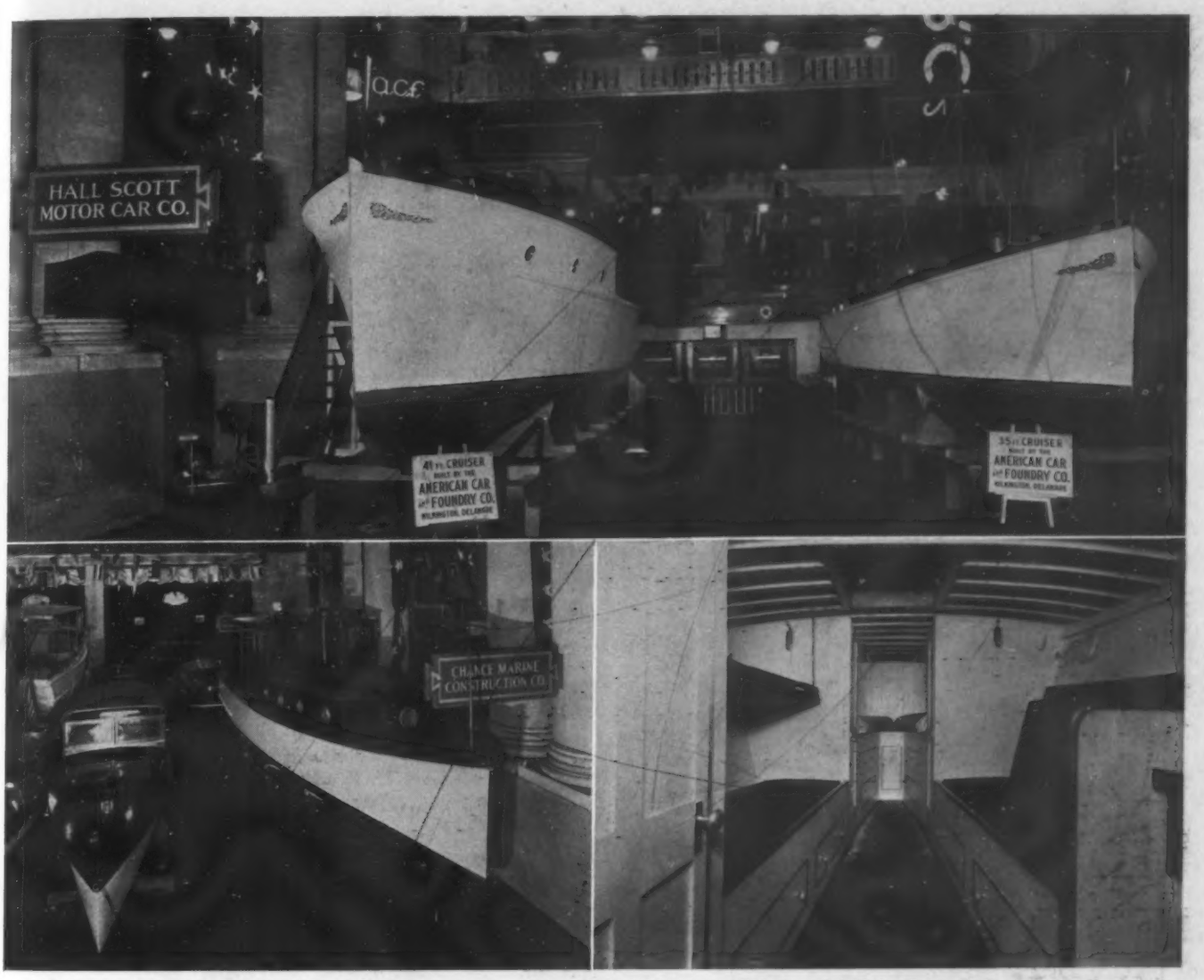
While designed primarily as a Class C boat, she can, with slight changes, be made to fit in Class B, or in the 6-meter Class, *Yachting Monthly* Cup Race. She has about the same size hull as Bull's *Polka Dot I*, and with a rig of some 3,000 square inches would rate in Class B, where she should be a good light weather boat. With another lead keel of approximately the same weight but of different shape to reduce the draft, and a sail area slightly less than her Class C rig, she could be made to rate (and have a good chance) in the 6-meter class above referred to. She thus, as it were, straddles the three classes, and might be made to fit any one of them without changing the hull proper.

Arrangements have been made with the designer to furnish complete blue prints of this boat for $4.00 and they can be had by addressing Thomas Moore, 401 23rd Street, N. W., Washington, D. C. Patterns of the lifts may also be secured, if desired, at slight additional expense.

Washington Model Yacht Club

At the last special meeting of the Washington (D. C.) Model Yacht Club it was announced that the U. S. Government has asked the club to submit plans for a club house suitable for the needs of the club, and to house its models, to cost not over $10,000, which the government proposed to build during the current

(*Continued on page 124*)



Above. The two A. C. F. Cruisers seen at the Show. Below. The Chance 36-footer, and the interior of the Dawn 38-footer, showing layout.

The Motor Boat Show

Some of the High Lights as Seen by the "Yachting" Staff

THE Motor Boat Show, held at the Grand Central Palace, New York, January 21st to 29th, was, to our way of thinking, the best exhibit of boats, engines and marine accessories ever gathered under one roof. There are no qualifications to this statement. There were more boats in evidence than ever before, the entire first floor being given up exclusively to them; and this is as it should be, for in the last analysis it is the boat that attracts and makes the real appeal. For one must have the boat before he needs the engine and equipment for her.

In looking over the exhibits this year two marked tendencies in types were to be noted. One of these is in the line of fast runabouts for day use only. The other is of a strictly cruising type, for week-end or vacation use, with full living accommodations for from four to eight persons. In both of these types higher speeds seem to be the tendency.

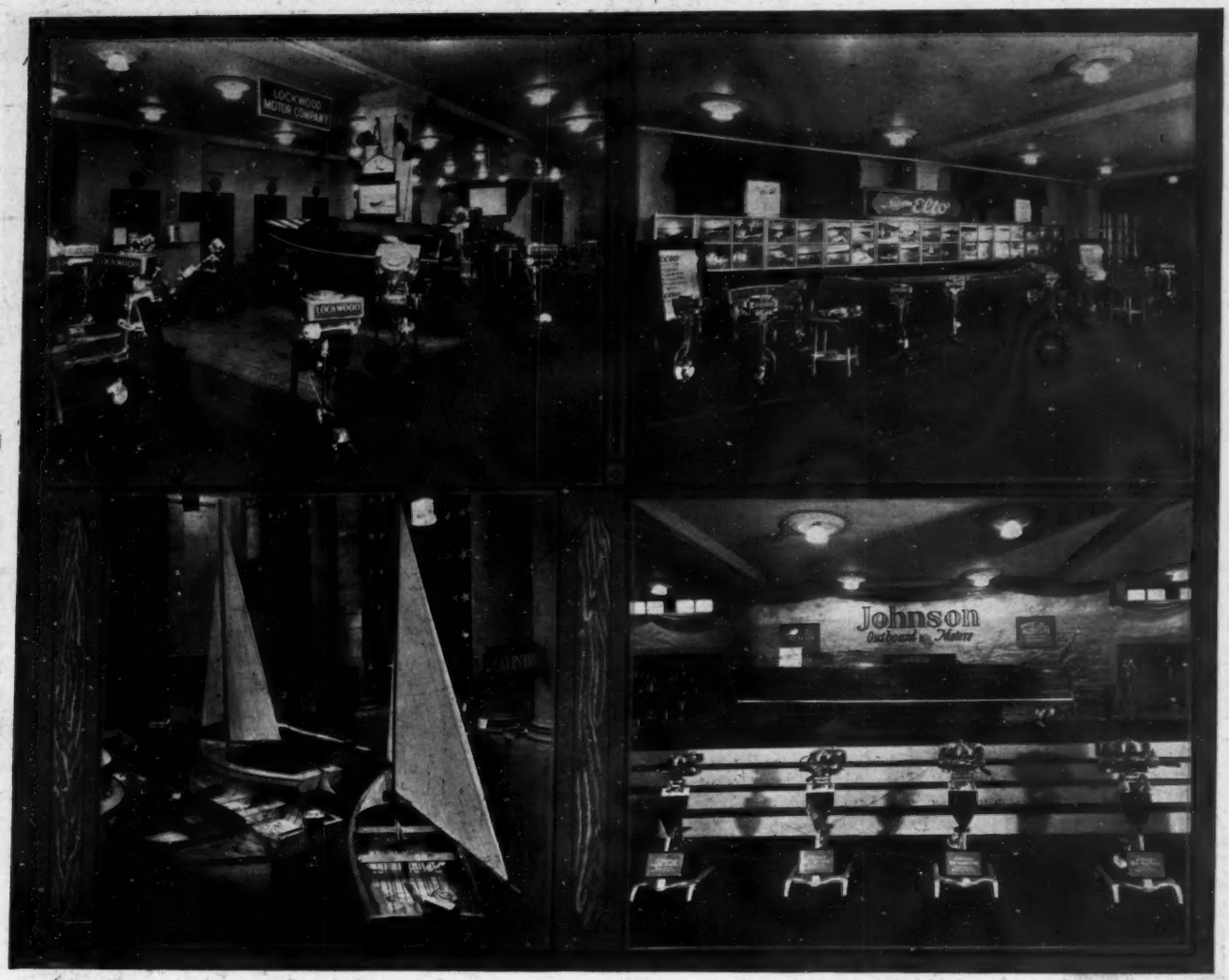
The use of the fast runabout for eastern waters seems to be growing very fast and this coming year, and the future, will see these craft increase in popularity in the sheltered waters along the coast. There was a wide range in size and speed, as well as in price, in the boats exhibited. The favorite size was from 22 to 28 feet in length, with speed ranges from 30 to 35 miles an hour, while for those who desire to "burn up the water" there were several craft capable of from 40 to 45 miles, with horsepower up to 250.

Some of the Cruisers

The pair of A. C. F. cruisers exhibited by S. Clyde Kyle and built by the American Car and Foundry Company offered all that one could ask for in boats between 35 and 41 feet in length. The 35-footer was a trunk cabin boat, with loads of room for an extended cruise for four persons. The 41-footer was of the double cabin type, offering every facility for a party of six or more and with a forward and an after sleeping cabin. Both were designed by Eldredge-McInnis and they proved one of the attractions of the Show.

For rugged, rough water work the Banfield pair were exceptionally interesting. Both are lap-strake construction, of the famous Jersey sea skiff model. One was a 38-foot DeLuxe raised deck cruiser, and the other the 30-foot Sailfish model, the former having a speed of 25 and the latter of 18 miles per hour, both using Kermath power plants.

The Chance 36-footer, built by the Chance Marine Construction Company, of Annapolis, Md., was a bridge-deck, single cabin cruiser with the accommodations of a much larger boat. She was a fine piece of work, with a large cockpit, well protected and capable of holding a large group of guests. One of these boats was purchased during the Show by Carrol B. Alker, president of the 10-meter one-design class, for use as a tender for his new 10-meter boat.



Some of the outboard motors. The Lockwood, Elto, outboards attached to a Cape Cod sailing skiff and row boat, and the Johnson line and Aquaflyer.

A 38-footer that was remarkably roomy and attractive was that of the Dawn Boat Corporation of New York. This model expressed individuality and workmanship, from stem to transom. There was no tendency to scrimp in the accommodations, and while the cockpit was unusually large there was room below for an excellent galley, a large main cabin and a double stateroom forward. She sleeps six comfortably and is able to go anywhere along the coast, from Nova Scotia to Florida.

In the mahogany planked, bright finished cruisers, the Hacker-Fermann 35-foot Sea Bird model and the Gray 36-footer, a Maine product, stood out in the fleet by their attractive finish and design. The former, a V-bottom model, has a speed of 24 miles per hour, and besides the handsome, attractively furnished cabin, there is a large roomy forward cockpit where one may get all the thrills of high speed in a small boat. The Gray boat has sleeping accommodations for five persons. Both jobs are Scripps powered.

The Marine Construction Company's 33-foot cruiser was a fine example of the conservation of space in a small craft. She was evidently designed by those experienced in cruising, for every inch of room was well utilized. She sleeps four below deck, and the after cockpit can be entirely enclosed. A 65 h.p. Kermath gives 15 miles per hour — all that should be desired in a rugged cruiser.

The Matthews 38-footer, a standardized cruiser of exceptional merit, was the same type of boat shown by the Matthews Company, of Port Clinton, Ohio, last year. She was a single cabin boat with an enclosed galley, and very well laid out to give the maximum of room and comfort in a craft of this length, at a price that was extremely attractive for the high grade of workmanship and material.

In the smaller craft the new Richardson 26-foot cruisabout, designed by Eldredge-McInnis, was one of the hits of the Show. Roomy, comfortable, and handsome, she is able to take care of four persons on a cruise, and makes 11 miles with a 6-cylinder Gray "40." The price brings the cruising boat within the reach of the man who does not want to have his yachting cost too much money.

The same can be said of this year's Elco 26-footer, with Elco engine, which proved most popular at the Palace. The others of the Elco line, the Cruisette, 34 feet long, and the intermediate sizes up to the 62-footer, were fully up to the high standards of this company and are too well known to need detailed description. The 62-footer was the largest yacht at the Show.

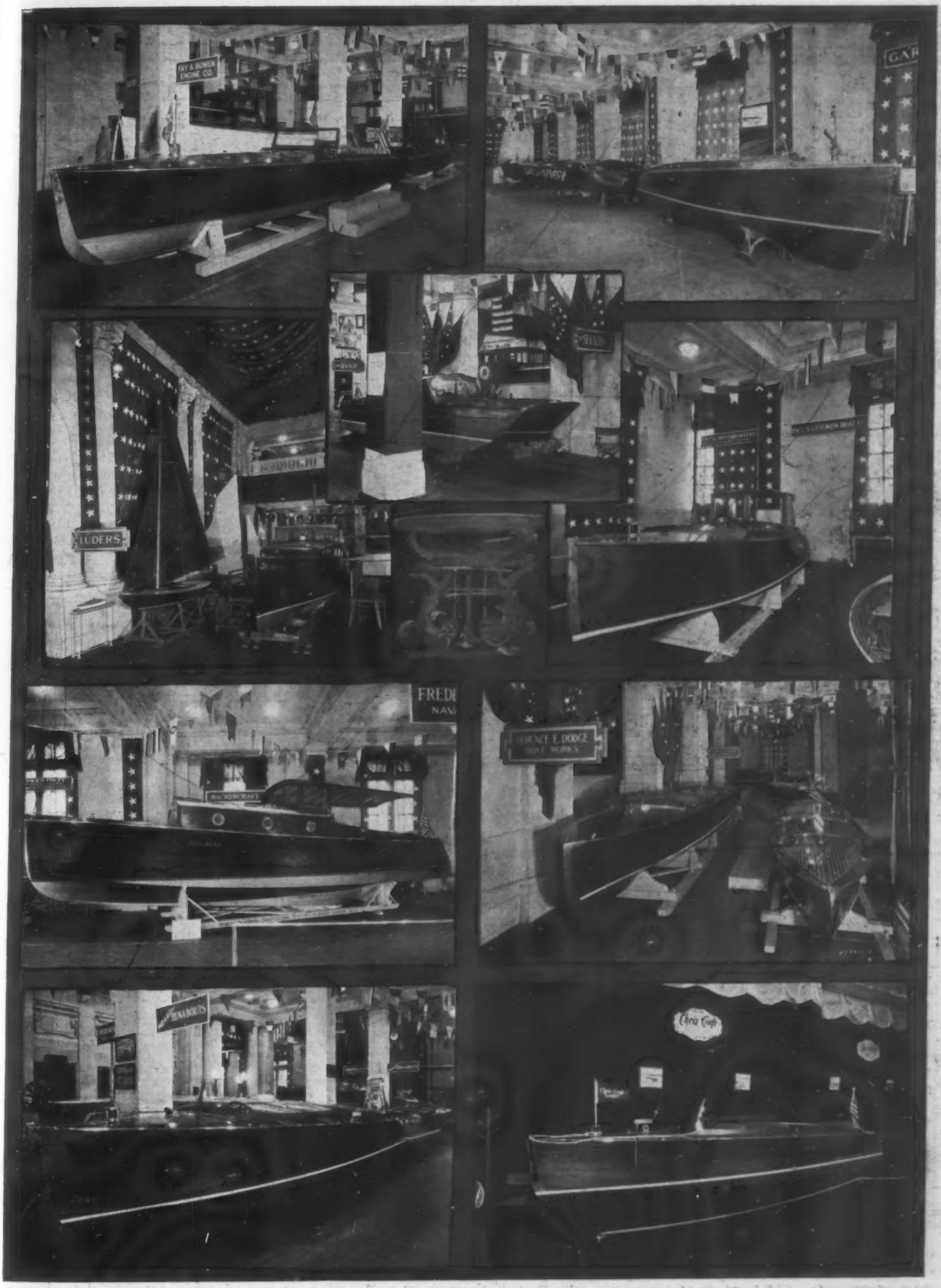
The George Lawley & Son Corporation's 38-footer, a single cabin boat with a stateroom forward, made a special appeal by reason of its exceedingly handsome appearance and finish, both below and on deck.

The Runabouts

There was an unusually large fleet of runabouts of exceedingly high quality seen at the Show this year. In fact, there were more of these than we remember at any other Show. Chris Smith & Son showed three boats, two 26-foot Chris-Craft and a 22-foot, all mahogany, Cadet model, capable of carrying eight persons, and making a speed of 25 miles per hour. The Indian Lake Boat Company had a Dart 26-foot mahogany runabout, and a Dart Junior, a 22-footer that will satisfy the sporting instinct of every man who loves the water. The company has permanent display rooms in New York City and Miami, Florida.

The Horace E. Dodge Boat Company exhibited a 26-foot Watercar, using a Dodge marine motor, a little 22-foot flyer with a speed of 30 miles, and a 37-foot racing speed boat of the famous *Horace* type.

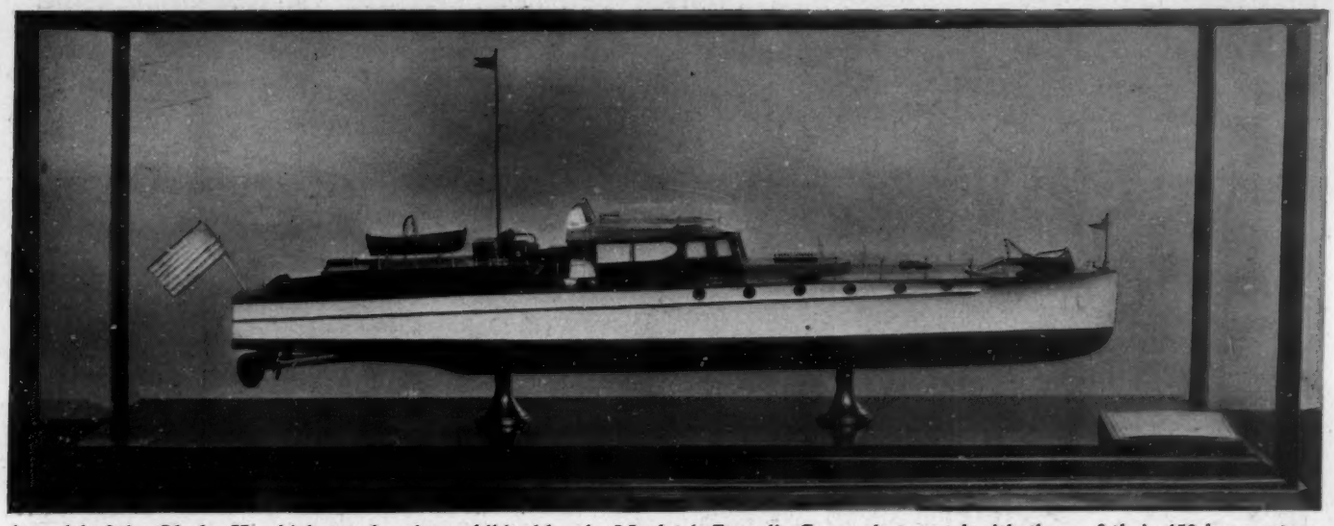
(*Continued on page 100*)



A group of runabouts and a fast cruiser at the Show. Left, top to bottom: Fay and Bowen Runabout, Luders "Commuter," Hacker & Fermann *Sea Bird*, Dart Runabout. Center: Sea Sled Sedan. Right: Baby Gar, Gesswein Boat Co., Dodge Watercars and Chris-Craft Cadet.

Some of the engine exhibits. Left, top to bottom; The Buda "Sixes," the Colo Diesel, the Evinrude outboard line, Hall-Scott gear reduction motors. Right; Red Wings, Ford, Payne & Sweisguth with the Fairbanks-Morse Diesel, Maybach-Zeppelin light weight motors, Peerless engines.

The accessory exhibits were most attractive. Left: Willis marine equipment. The Lux fire extinguishing system, Hyde propellers, and Berry marine varnishes and paints. Right: Ovington's yacht china and glassware, Topping Brothers' marine hardware, the American Engineering Company's electric windlasses, and the Frigidaire refrigerating system.



A model of the *Oheka II,* a high-speed cruiser exhibited by the Maybach-Zeppelin Co., and powered with three of their 450 h.p. motors.

(*Continued from page 96*)

The Belle Isle *Bearcats* were a particularly high grade proposition for the man who wants plenty of speed together with a luxurious and snappy craft, fit to be seen in any company. The Fay & Bowen Company, of Geneva, N. Y., had two handsome and fast mahogany runabouts, a 22-footer and a 27-footer, especially adapted for lake, river, and bay use.

The feature of the Sea Sled exhibit this year was the sedan cabin over the forward cockpit, fully protecting the occupants from spray, rain and wind. Four models were exhibited, the largest being 28 feet in length. These boats are becoming increasingly popular where open waters make a seaworthy model necessary.

The new models of the Baby-Gar runabouts were particularly attractive, the larger boat, a 33-footer, showing speeds up to 55 miles an hour with a Gar Wood engine. The Baby Gar Junior, a 26-footer, shows speeds of 30 to 40 miles an hour, depending on whether a 100 or 150 h.p. Scripps is used. The other model was a 28-footer.

The Gesswein Boat Company exhibited a handsome little Sportabout, a two-cockpit craft with a sedan top over the after seats. This sells at a most attractive price and was one of the hits of the Show.

The Hacker & Fermann *Dolphin* was exhibited in three sizes, 24, 28 and 30 feet in length — an extremely high grade job in each case, embodying, as they do, the workmanship, experience and design of the firm that builds them. The Johnson *Aquaflyer* is a runabout well within the means of the man with not too long a pocketbook. This is a 17-footer, built entirely of mahogany with an outboard motor housed in a recess in the stern. They are capable of 18 miles a hour with this outfit and sell at less than $700, the boat and engine weighing, complete, about 450 pounds.

A sturdy, fast runabout, for rough water use, was the Barbay Sea Skiff, exhibited by Johnson Brothers, of Point Pleasant, N. J. The model lends itself particularly well to rough water and is 25′ 9″ long, with a speed of 30 miles per hour, attained with a model G-6 Scripps engine. The cockpit is protected at the forward end by an enclosed shelter cabin.

Engines

Engines of all sizes and types, for all kinds of craft, were shown on the second floor of the Palace. The Sterling exhibit was a particularly attractive one, where were seen all the models of this well known make, interest naturally being centered in the new Petrel model, a number of which were sold on the spot to be installed in power driven craft for the coming season.

Several neat models of the 4-cylinder Universals attracted considerable attention from those interested in motors of low and moderate power. Both the Flexifour and the Superfour were shown equipped with silent reduction gears, making them particularly adaptable to auxiliaries and heavy cruisers.

Winton had a nice display of both gasoline and Diesel motors, two model 114, 6-cylinder 150 h.p. Diesels, one model 120 6-cylinder, and a 350 h.p. gasoline engine. Hall-Scott had a fine display of their full line of gasoline motors, including the new 175 h.p. reduction gear model.

Diesel motors were seen in several booths, not only in the usual large sizes, but several in the smaller. In addition to the Wintons, mentioned above, there was a new model Fairbanks-Morse, 4-cylinder, 2-cycle, shown in Ford, Payne & Sweisguth's booth, to be installed in the schooner *Golden Hind.* The Bessemer Gas Engine Co. showed a 6-cylinder, direct reversible Bessemer Diesel motor developing 230 h.p. at 300 r.p.m. Among the smaller motors were two models of the Colo-Diesel, a 4-cylinder, 32 h.p., and a 3-cylinder, 24 h.p. model. The Marnus Co. showed a 70 h.p. direct reversible Diesel model, in addition to their line of 2- and 4-cycle gasoline motors.

The various models of the Van Blerck Navy type, and Continental-Van Blerck motors, were well displayed on the mezzanine floor. In addition to their regular attractive line of 4-cycle motors of various sizes, the Kermath Mfg. Co. showed for the first time their new 150 h.p. valve-in-head, dual carburetor motor, which attracted much favorable comment.

The big line of Palmer motors, of varying power and number of cylinders, got a lot of attention. The new 4-cylinder Little Huskie was thoroughly investigated by owners of small craft and auxiliaries, whose comment was entirely favorable. Peerless showed some attractive models in 4-cycle machines, including the new 151 cu. in. racing motor. The Scripps Motor Co. had a large display of 4- and 6-cylinder models, including the Junior Gold Cup model. The little Hallet 4-cylinder machine was another newcomer which took the eye of many showgoers, as did the several fine looking models of 2-, 4- and 6-cylinder Red Wings.

Altogether, the display of engines was one of the best and most complete ever seen at a motor boat show.

The Accessories

Many showgoers who already owned satisfactory boats and motors were on the lookout for various fittings and "gadjets," and on the third floor they certainly had plenty to choose from, for a better accessory exhibit could hardly be asked for. The E. J. Willis Co., in addition to a large showing of Penn Yan dinks, canoes, tenders, etc., on the second floor, had another fine booth on the third floor, showing a splendid line of marine fittings, stoves, etc. The W. & J. Tiebout Co. also had a large variety of equipment for both sail and motor craft, as did the Wilcox Crittenden Co. Topping Brothers exhibited the latest and best in the equipment line, as well as heavy marine hardware.

The American Engineering Co. had an excellent display of their well known pumps, winches, boat hoists, etc., all of which were appreciated by the critical observer. Monel metal propeller shafts, wire tiller rope, and other marine hardware were shown by the International Nickel Co. The Columbian Bronze Co. showed eight types of manganese bronze propellers, and the Hyde Windlass Co. had a fine line of wheels, including weedless

(*Continued on page 124*)

Havana's Annual Star Race Week

Edrington's "Sparkler" Wins Mid-Winter Title — United States Defeats Cuba in Team Race — "Ace" Takes Bacardi Cup

THE spotlight now plays on old New Orleans, for it has just been presented with its first Star Class championship by Prentice E. Edrington, winner of the 1927 Mid-Winter title at Havana. *Sparkler* made a clean sweep of the local eliminations last November and the Vice President of the Star Class carried his winning streak right through "Les Petite Internationals" and won the Cuban annual classic by the narrow margin of one point over Ratsey's defending *Irex IV* of Western Long Island Sound.

The veteran Star skippers from the Sound were by no means eclipsed, however, as Adrien Iselin sailed his *Ace*

Messrs. Gray and Edrington, and the Mid-Winter Challenge Trophy.

to victory in the open series, that was added to the program this year, and won the Bacardi Cup. The Western L. I. fleet was also successful in placing all three yachts, which it sent to Havana, on the All-American quartet which defeated Cuba, by a score of 21 to 9, in the annual International Team Race.

Havana's Star Class Week, which lasted from January 27th to February 4th, was again a huge success. Eight fleets, from various parts of North America, entered the one representative which they are allowed in the Mid-Winter championship and sixteen yachts, a new record for Cuban waters, participated in the open series of three races, which was sailed on alternate days. The races were conducted by the Flota de la Habana and held under the joint auspices of the International Star Class Y. R. A. and the National Tourist Commission of Cuba. The visiting yachtsmen were the guests of the Habana Y. C., where they were quartered during their stay in Cuba. The races were sailed out on the open waters of the Gulf of Mexico, just beyond the breakers, thereby giving the spectators along the Malecon a splendid view of the entire course.

Clear, cool weather and fresh northeasterly breezes prevailed throughout. The triangular course, used all but one day, gave a beat to the Morro Castle buoy, then a run down the coast towards the Alamendares River, and a beat or close reach back to the line. Sailed three times around, it made a total of ten nautical miles.

Ardara took an early lead in the first championship race but was soon overtaken by *Sparkler*, Edrington winning by one minute over *Irex IV*. McHugh finished third but was disqualified for not giving *Aurrera* room at a mark and third prize went to *Tom Boy*. The second race, a leeward and windward affair, was sailed in light and fluky airs. *Moondyne*, Gravesend's representative from the Yvette Y. C. of Staten Island, split tacks, and picking up a favorable slant, came home the winner by a minute and a half. *Irex IV* beat *Sparkler* out for second place by one

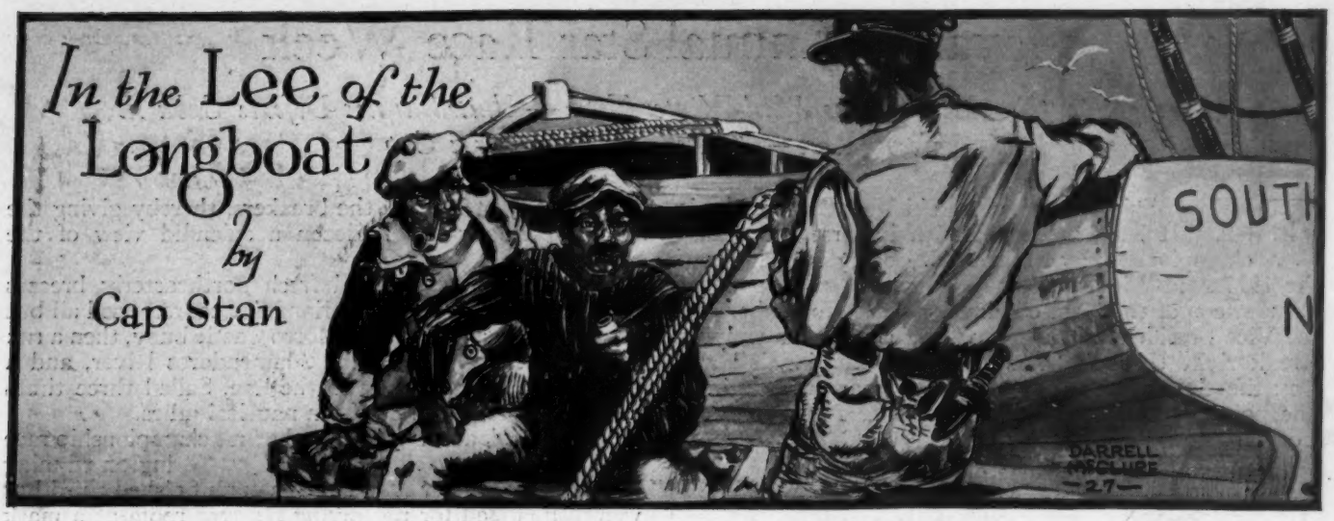
The Bacardi Trophy and winning crew, Messrs. Willis and Iselin.

second and made the series a tie. *Ardara* did not start, having been dismasted the previous day in the open race. The third and deciding race was won by McHugh, while Edrington devoted his attention to covering the *Irex*. Holding the defender on the reaches and runs, *Sparkler* increased her lead on every windward leg and crossed the

(*Continued on page 128*)

In the Lee of the Longboat

by Cap Stan



WELL, the Motor Boat Show is over, and, from all accounts, exceeded in attendance and sales all previous shows. It certainly was larger than ever before, spreading over three floors as against two in other years. To the old timers, one show is very much like another; but those same old timers seemed unanimous about two things: it was the best show ever held, and the exhibits were more attractively displayed than usual. Some of the little things which struck me were the increased number of "movies" at the different booths, the ones of *Whistler*, the Free-Bottom Craft, and the Lux method of extinguishing a fire, making a particular impression; the big exhibits of outboard motors, and boats for them to be "buttoned on;" the handsome exhibit of Sterling motors; the huge number of mahogany runabouts, and the general excellence of their construction and finish; the up-to-the-minute navigating appliances shown by Kelvin-White, for both sail and motor driven craft; the nautical andirons made in the form of anchors, shown by Wilcox-Crittenden.

So, with the Show over, we can clear the decks and lay plans for the spring and summer — and neither is very far off, so get busy!

* * *

In the December issue of one of our contemporaries — a craft launched less than a year ago — there appears the design of a fine looking catboat, labelled simply "Winteringham." (Did he mean Wintringham?) The description accompanying the design was short but sweet — perhaps the editor was short of space, or something. I wish I had had the job of writing it up. My write-up would have run something like this: "Designs of good catboats are hard to get, wherefore we make no apology for reproducing the plans of this splendid little craft which Mr. Richard B. Cook turned out some dozen years ago. The original plans came out in YACHTING for December, 1914, and were accompanied by a 'how-to-build' article which has been acclaimed by at least one critic as one of the finest articles of its kind ever published."

* * *

Well, at last you've had a chance to look over the plans of Fritz Fenger's self-steering boat, evolved by an experienced student of the game who fully appreciates the lure of a cruising craft which will hold a given course without attention from the helmsman. Will she fulfill the fond hopes of her creator? Blessed if I know. In some respects she conforms to certain half-formed theories of my own, formed principally from experience in a hooker with a similarly-shaped lateral plane. And in some ways she seems wrong. A prominent naval architect, to whom I showed the plans, stated decisively — "I would say that is just the kind of boat which would *not* steer herself." Whether Fritz or the N. A. is correct remains to be seen. However, we at least have, at last, someone who is delving deep into the problem, and I shouldn't be in the least surprised to find that Fritz was on the right track. I'll certainly await the model trials with interest, and if they work out, hope someone will have the gumption to build a regular-sized boat later on.

* * *

If, as has been stated by more than one keen analyst, international competition in the realm of sport is a great help towards mutual understanding between nations, yachting events in 1927 should go a long ways towards preventing future conflicts. American Star boats have already been racing off Havana as guests of the Cubans. In April, four Sound Interclubs will compete against four Bermudian craft in Bermudian waters. An American schooner, now building, will compete against the Britishers in the Fastnet Ocean Race. A Norwegian 6-meter craft will try to win back the Seawanhaka Cup, while Norway and Holland, and possibly Sweden and Finland, will try and recapture the Scandinavian Gold Cup, won last year by the famous 6-meter boat *Lanai*, which also recaptured the Seawanhaka Cup for America. Canadian and American Class R boats will again compete for the George Cup on Lake Ontario, and there will be another crew match between Canadian sailors and Barnegat tars, held in the Inland Lake "scows." Why not try and get the Mexicans and Chinese interested in yacht racing?

* * *

While the Cape May Ocean Race has gotten off to a fine start, with something over fifteen entries so far, the idea of continuing on to Chesapeake Bay has not, so far, induced any club to undertake the event, so it looks as though we would have to be satisfied with the short 220-mile jump from New London to Cape May. Wouldn't it be a "rum go" if the fleet struck a June nor'easter, and the faster boats finished in little over 24 hours? Of course, there's more apt to be light southerly weather, making it a windward test most of the way. Whatever the conditions, the Corinthians will be on the job at the finish, and if everyone doesn't have a good time it will be their own fault.

Oh yes, there have been rumblings recently in Connecticut which would indicate that the New Haven Yacht Club would announce something regarding a long distance race to be held this summer. If Captain Osborn will shoot me the details, I'll let you know all about it. Fire when you're ready, Captain.

Photo by Times Wide World

You can't "drown" *Valspar!*

DURING the recent floods in India, Valspar again demonstrated its wonderful waterproof qualities for which it is famous the world over. For hours at a time the Valsparred buses of Calcutta had to plow through the flooded streets, but when the water and mud were wiped away, the Valspar finish always came up smiling!

Because Valspar is so remarkably waterproof and durable, it is the one varnish that is universally used to protect surfaces exposed to water, weather and hard wear. On boats of all kinds it has met with such widespread favor that now it is known as the standard varnish for marine use. And this applies not only to clear Valspar, but to all the Valspar Marine finishes.

For hulls, there is *Valspar Yacht White (or Black)* which is easy to apply and which keeps your boat looking shipshape in spite of hard use.

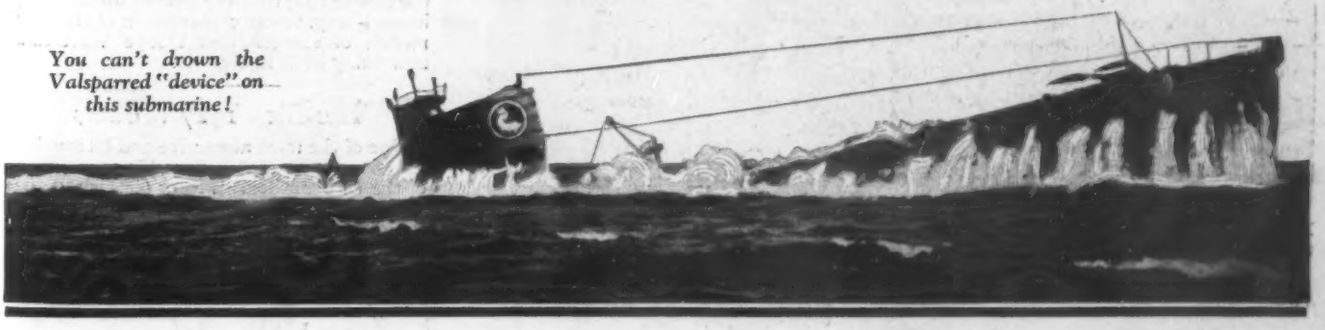
Then there is *Valspar Bronze Bottom Paint* which keeps the bottom of your boat free from barnacles all season.

Also *Valspar-Enamel* and *Valspar Varnish-Stain*, which are Valspar Varnish in opaque and transparent colors respectively, *Valspar Gold, Valspar Aluminum and Valspar Boot Topping.* All bear the famous Valspar name. Therefore, like Valspar Varnish they *can't be drowned!*

VALENTINE'S
VALSPAR
The Varnish That Won't Turn White

VALENTINE & COMPANY
456 Fourth Avenue, New York
Boston Chicago W. P. FULLER & CO., Pacific Coast

You can't drown the Valsparred "device" on this submarine!



Keewaydin, a 38-foot cruiser built by F. D. Lawley, Inc., Quincy, Mass., for C. B. Pratt. She is powered with a 6-cylinder Continental-Van Blerck motor.

Of Interest to the Skipper

Keewaydin, a Trim Cruiser

The accompanying photograph of *Keewaydin* is an excellent illustration of the modern type of cruiser being turned out by Fred Lawley, of Quincy, Mass. She is 38 feet over all, 10 feet 4 inches beam, and 2 feet 6 inches draft, and was built for Mr. C. B. Pratt, of the Standard Oil Company. A Continental-Van Blerck Model 252, 6-cylinder motor with bore of 3¾ inches and stroke of 5 inches drives her at fine speed. The accommodations include a stateroom, main cabin, large, well equipped galley, toilet room, and an extra roomy cockpit. *Keewaydin* combines good looks with comfort, speed and seagoing ability, and in build, finish and equipment reflects the high standards always adhered to in the Fred Lawley organization.

The Acme Folding Boat

Anyone interested in a specially designed craft for use with an outboard motor should not fail to investigate the Acme Folding Boat, the product of the Acme Folding Boat Co., of Miamisburg, Ohio, one of the oldest and largest builders of folding canvas boats. This is a new type of V-bottom, square stern craft, fashioned somewhat along the lines of the famous Baby Buzz type after much experimenting and testing. It is excellently adapted for use with any outboard motor, and its speed possibilities are shown by tests made with a Johnson Big Twin, when a speed of better than 20 m.p.h. was developed. The greatest advantage, however, lies in the fact that it can be easily folded into a neat, compact package for storage, or transportation to remote waterways.

The Johnson Motor Co., of South Bend, Ind., has taken over the exclusive foreign and domestic selling rights to the Acme Boat, which means that the new craft may be procured from all dealers in Johnson Outboards throughout the country, and abroad. The Peterborough Canoe Co., of Peterborough, Canada, will act as exclusive distributors in Canada.

A Rigid Test for Chris-Craft

The accompanying photograph shows Samuel Untermeyer's Chris-Craft tender returning to the Smith Plant at Algonac, after being tested and pronounced "Okay" by Bernard Smith, famous racing mechanician of J. J. Ryan, J. Stuart Blackton, Robert Edgren, Gar Wood, Col. J. G. Vincent, and other racing teams. This boat and two standard Chris-Craft were tested on December 14th with the temperature 18 degrees below freezing. The St. Clair River was free of ice but a channel had to be cut through 4 inches of ice and kept open in the canal leading to the river to permit these tests to be made, and prevent any damage to the boats.

Bernard Smith personally drives all Chris-Craft before they are taken from the water and given their final coat of Valspar Varnish. Chris Smith & Sons Boat Co. are so sincere in the testing of their boats that a mere matter of extremely cold weather and 4 inches of ice could not stop them from thoroughly testing these boats before they are shipped to their customers.

Mr. Untermeyer's tender was delivered in Miami December 27th and placed aboard his yacht *Nirodha*. This particular tender was powered with a 100 h.p. 6-cylinder Kermath Marine Engine doing 28 m.p.h.

Mr. David P. Whitney of Detroit, owner of the beautiful yacht *Sumar*, carries a standard Chris-Craft runabout as an auxiliary, and also a Chris-Craft tender, powered with a 160 h.p. Kermath and capable of 38 m.p.h. The *Sumar* is now in Southern waters.

Breaking through the ice at Algonac, Mich., with a Chris-Craft runabout in order that the builders, Chris Smith & Sons Boat Co., may run the trials to which all the boats from this plant are subjected.

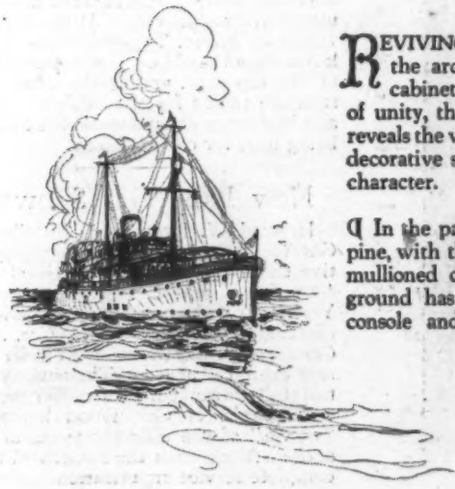
To Study Boats by Flying

Horace E. Dodge, president of the Horace E. Dodge Boat Works of Detroit, left recently for Europe to make a first hand study of every important boat building plant in England and on the Continent. He will be gone from three to six months, and in traveling about from city to city, will use his own Stinson airplane, piloted by his personal aviator, Marion Sterling. Mr. Sterling is following Mr. Dodge with the plane in about two weeks and will meet him in Paris, whence they will start out on their tour of the boat building plants with the idea of adapting any new manufacturing ideas, if any, to the construction of the four models of standardized Dodge Watercars now being built in Detroit.

The Elto 1927 Models

One of the most attractive and interesting exhibits at the Motor Boat Show was that of the Elto Outboard Motor Co., where the 1927 models of this well known outboard reflected creditably to Ole Evinrude, a pioneer in the outboard field. That Mr. Evinrude is still progressing is shown by

New York Galleries, Inc., Decorator



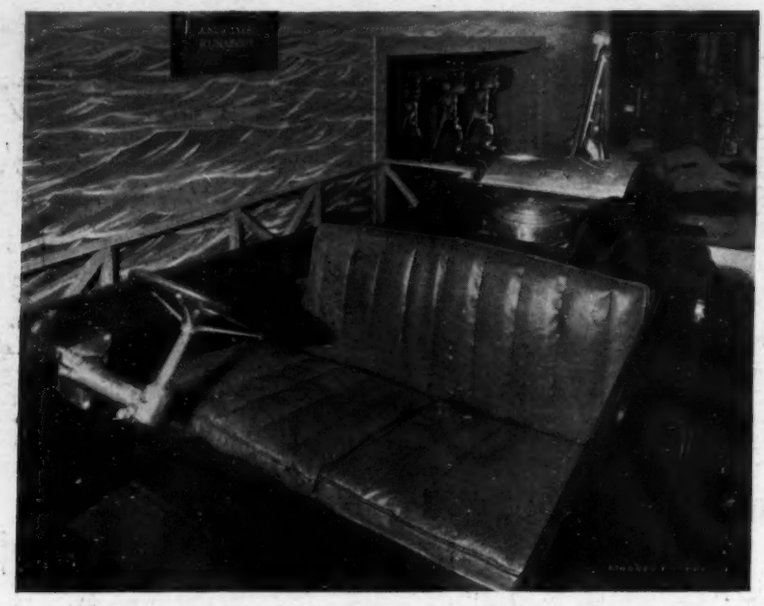
REVIVING the tradition of an age when the architect, the decorator and the cabinetmaker were inspired by a spirit of unity, this late XVII Century interior reveals the very essence of a well considered decorative scheme—harmony of scale and character.

¶ In the paneled walls of mellow natural pine, with their richly carven cornice and mullioned cabinets, a sympathetic background has been created for the classic console and mirror, the elaborate table and other pieces, while touches of color in the ancestral portrait and damask chair coverings relieve the deep, warm tones of pine and walnut.

¶ It is quite possible to achieve this gratifying effect in the appointments of your yacht, as well—a fact which this organization of decorators and cabinetmakers has demonstrated aboard such fine vessels as Mr. W. K. Vanderbilt's *Ara*, Col. Nicholson's *Sea Dream* and Mr. A. Y. Gowan's schooner *Speejacks*.

New York Galleries
INCORPORATED
Madison Avenue, 48th and 49th Streets

© 1927, N.Y.G.



Stern of the Johnson Aquaflyer, showing method of installing the outboard motor.

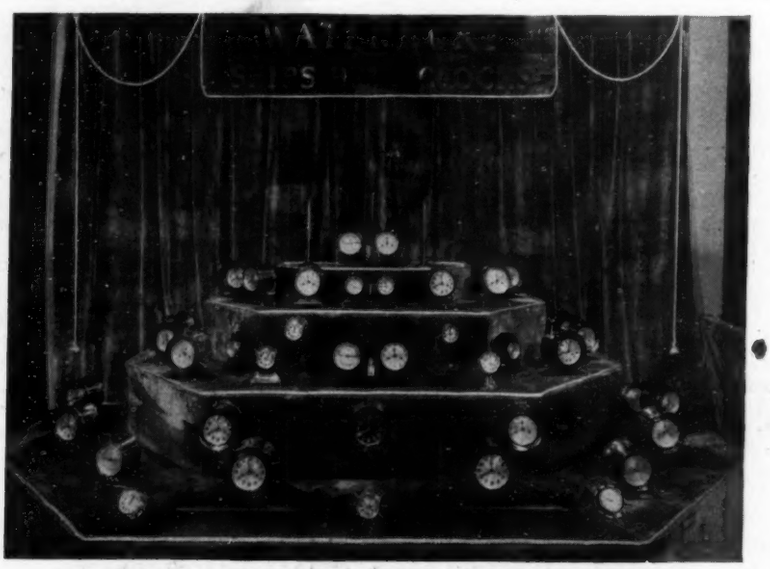
several new features on the 1927 models, such as the Propeller Safety Trip, Reverse Latch, Double Bearing Principle, etc. The Propeller Safety Trip is an ingenious arrangement consisting of a tapered jaw in the propeller hub, which meshes with a similar jaw attached to the lower main housing. These are held in mesh by a strong, adjustable spring. The pressure of striking an under water obstruction with the propeller causes these jaws to disengage until the danger of damage is past. Then the spring forces them back into place. This is a positive clutch-like action, and has the distinct advantage of affording no possibility for loss of power through slippage. The Safety Propeller Trip has eliminated the need for shear pins, and avoids the possibility of propeller damage, features which are sure to be appreciated by all outboard users.

The Reverse Latch, another of the new features, can be thrown into place with one finger, making it impossible for the motor to tilt while operating in reverse. The Double Bearing principle is used for the first time in outboards. Large bronze bearings are pressed into the lower main housing, and the usual bearings fitted into them, making corrosion impossible and providing an extreme measure of protection against wear.

An Attractive Booklet

One of the most important considerations on board a yacht, whether a sailing craft or motor boat, is the question of lights and lighting fixtures, both for use on deck and inside the boat. In order to help yachtsmen select the right light or the right fixture for a particular purpose, the National Marine Lamp Co., of Forestville, Conn., have published a most attractive booklet on the subject, illustrating and describing the many types and sizes of lamps and lights which they manufacture. Included in this little booklet are cuts of sailing lights, both oil burning and electric, in both brass and galvanized types, hurricane riding lights, electric and oil running lights, electric stern lights, bulkhead oil lamps of various types, electric dome lights and fixtures, searchlights, portable hand lanterns, fog horns, pumps, ventilators, etc. It is an excellent guide for anyone looking for any type of marine light, and will be sent prepaid to anyone who writes for it, mentioning YACHTING.

The Acme folding boat making speed with an outboard motor.



A fine collection of ship's clocks exhibited by the Waterbury Clock Co.

New Offices of Crowninshield, Burbank & Howard

Crowninshield, Burbank & Howard, naval architects and yacht brokers of Boston, have moved their offices from 31 State Street, to 114 State Street. The new offices are much larger than the old ones, excellently situated on the top floor, and ideally arranged with separate rooms for the drafting, insurance and brokerage departments, the main rooms being used for consultations.

New Baby Gar Showroom

Howard W. Lyon, Inc., distributors for Gar Wood, have opened a decidedly attractive showroom in the New Hotel Barclay, 48th Street and Lexington Avenue, New York City, where they are showing three glistening *Baby Gars — Baby Gar, Jr., Baby Gar 28,* and *Baby Gar 33* — as well as a separate exhibit of motors. The entire exhibit is tastefully arranged, with walls covered with photographs of Gar Wood boats, and a "movie" of the different types of craft in action. Along with the showroom is a very complete service organization.

The Boat Owner says

"Unequalled for sport, health and real comfort"

I NEVER feel that I have really cut loose from business until I get off in my boat out there.

She represents a wonderful combination of the qualities I want most in a craft. Not a high speed racer, such as my son likes, nor even a slow family cruiser.

I like a bit of a thrill occasionally and I get it when I let her out.

There's sport and health and real comfort in her. She's a Consolidated, of course, and there isn't anything finer for her size afloat.

Consolidated yachts are designed, built, powered and fully equipped by Consolidated—the largest makers of pleasure boats and their propelling machinery in the world.

Details of any size or type of boat will be gladly furnished on request—yacht tenders, day cruisers, commuters, yachts.

We have a Playboat ready for immediate shipment South. Let us send you full details regarding it.

Consolidated Shipbuilding Corp.
Morris Heights **New York**

Makers of *Yachts* and *Speedway* Engines

Books for the Yachtsman's Library

Across the Atlantic in Sea Bird

By Thomas Fleming Day
Fore An' Aft, Inc. — 1927

IT is always pleasant to meet old ships we've known, "dolled up" in a fresh coat of paint and with a new suit of sails, and so, when we see *Across the Atlantic in Sea Bird* again we naturally feel like going aboard for a gam with the Oldman.

It is now sixteen years since Captain Day made his memorable voyage from Providence to Gibraltar in the *Sea Bird*, but the reading of the story of that passage across the Western Ocean is as entertaining today as it was when it first appeared in 1911. For, of all the long ocean voyages in small boats, this one is nearest to the hearts of yachtsmen, because Day not only was one of them, a man most of us knew personally and loved, but also by reason of the fact that the *Bird* was one of the smallest boats to make the passage and was not built especially for this voyage, but was designed for ordinary coastwise cruising.

Another generation of yachtsmen has grown up since the *Bird's* famous passage and it is fitting that they should have the opportunity to read the Oldman's story. Such voyages as this deserve to live forever, and the tradition of the sea and of yachting demands that the chronicles of them be kept alive. We are glad that the book has been reprinted.

The story tells not only of the passage across, which was made in excellent time even for a vessel much larger than the *Sea Bird*, but also of the preparations for the voyage, the outfitting and the ship's company, and it is enlivened by many anecdotes told in the intriguing manner of Skipper Day. Also there is much valuable information and plenty of "horse sense" on handling small boats at sea.

H. L. S.

Q-Ships and Their Story

By E. Keble Chatterton
Charles E. Lauriat Co. — 1927

THOSE of us who served in the Navy "on the other side" during the late war heard whispers, from time to time, of mysterious craft usually dubbed "mystery ships," or "Q-ships," disguised merchant vessels which, by their harmless appearance, lured the German U-boat to close quarters, and then unmasked a battery of guns and riddled the Hun before the astonished Germans knew what it was all about. Little was known about these craft, though the air was frequently thick with rumors. But now, for the first time, the full story is out. *Q-Ships and Their Story*, by E. Keble Chatterton, is an astonishing and absorbing tale of a little-known phase of the submarine warfare played by Allied decoys, in which bravery and brains played an all-important part.

Tramp steamers, yachts, sailing vessels, trawlers, smacks and what-not were employed in this extremely hazardous service. Officers and crews were recruited from every source — from warships, barracks, office, yacht, fishing vessel, and elsewhere — to man these unarmored, slow-moving, lightly-armed vessels to perform the desperate adventure of acting as live bait for a merciless enemy. For the business of the Q-ship was to get into contact with an enemy submarine, submit to shelling and torpedoing without reply until the submarine, believing her enemy helpless and harmless, approached to point-blank range, when the Q-ship turned loose her masked batteries and endeavored to sink the U-boat before she could run away or submerge.

Mr. Chatterton was himself on patrol duty along the southwest coast of Ireland, and frequently came into contact not only with the Q-ships themselves, but with the officers and crews who manned them. He has gathered together remarkable data from diaries of commanding officers, copies of official reports, plans, sketches, photographs, etc. All this information has been augmented by personal conversation, correspondence, and valuable criticism from those who actually took part in this hazardous, heroic and successful warfare against the under water menace which threatened to end the war disastrously for the Allies. *Q-Ships and Their Story* is a volume which enthralls one from start to finish.

S. W.

The Fore and Aft Rig in America

By E. P. Morris
Yale University Press — 1927

SO much has been written about old-time ships, dealing mostly with foreign types, that we are prone to forget that right here in our own country there have been developed, over a period of over two hundred years, craft which were designed and rigged according to our own ideas, to meet our own particular requirements. In *The Fore and Aft Rig in America*, Mr. Morris has given us, after a great deal of painstaking research, a typically American volume which, as its title indicates, is a history of the various types of craft with fore and aft rig which for hundreds of years have traversed the inland, coastal and ocean waterways of the American continent.

Reproductions of delightful old prints, interspersed with sketches, paintings and photographs, give an excellent idea of the various types of fore and aft rigged craft since the early 16th Century. Along with the more or less familiar sloops, brigs and ketches are descriptions of little-known craft such as the Merrimac River gundalow, shallop, Quoddy Head boat, Key West smackee, New Orleans lugger, etc., gradually leading up to the more modern schooner, sloop, ketch and catboat. One of the many unusually interesting facts brought out by the author is that the forerunner of the modern staysail-rigged schooner was really invented by R. B. Forbes, of Boston, who proposed to substitute two staysails for the foresail of a schooner. Altogether, Mr. Morris has given us an interesting and instructive volume of distinct historical value, which will be appreciated by the yachtsman who is interested in knowing something about old-time boats and rigs as well as the modern craft of the present era.

S. W.

The following new books have been received recently, and will be reviewed in an early issue of YACHTING:

Sailing Across Europe	Megley Farson
Ship Model Making — Volume II	Capt. E. A. McCann
Windjammers and Shellbacks	E. Keble Chatterton
Fogs and Clouds	William J. Humphreys

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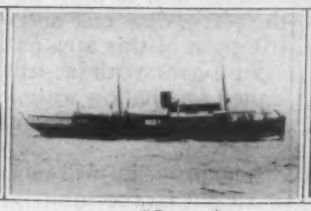
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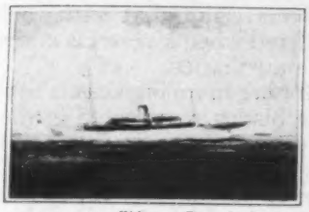
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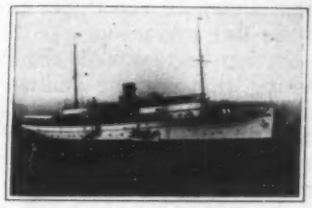
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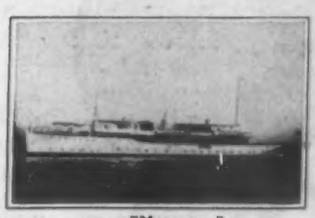
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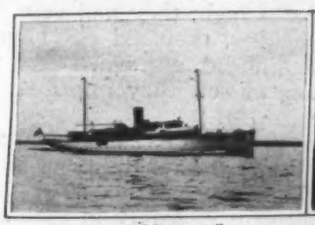
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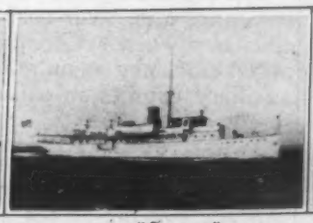
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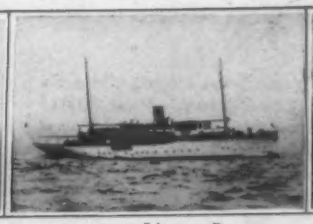
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Your Propeller

(*Continued from page 78*)

pellers have to be of considerably larger diameter with low pitch, and they must be unusually strong to stand the unequal stress to which each blade is subjected, as it enters and leaves the water.

Vibration is one of the disadvantages of surface propulsion, and is only overcome by proper proportioning the pitch, diameter and effective blade area, and the distribution of this area as well.

In boats with so-called "tunnel" construction, designed for shallow waters, practically the same types and sizes of propellers are used as on boats of regular construction.

The propeller will race in this type of boat until the air is all out of the tunnel, after which it will function normally.

Feathering propeller types are not used to any great extent. Their manufacturers claim that with their use very little resistance is offered when a vessel is under sail. They are found mostly in auxiliaries.

In this type, designed for use in sailing vessels equipped with auxiliary power, the blades are pivoted in the hub. When under sail the pressure of the water against the blades changes their angularity so that they are in the position shown in the lower part of Fig. 13, offering the least possible resistance to the flow of water. However, when power is applied to rotate the propeller shaft, the blades assume the position shown in the upper part of Fig. 13, driving against the flat surface of the blades. Should the direction of rotation be reversed, the blades automatically rotate, passing through the sailing position until they reach a similar position to that when going ahead, except that the flat driving surface of the blades, rather than the crowning surface as in ordinary types, drives the water ahead and the boat astern.

It will be noted that when no power is being transmitted through the propeller shaft, the propulsion of the boat by the sails renders the propeller inoperative, putting it in as neutral a position as possible, while power applied to rotate the propeller shaft sets the blades in position to drive the boat either ahead or astern, depending upon the direction of propeller shaft rotation.

Feathering propellers have slightly larger hubs than regular types of rigid blade design, and the angle of incidence at the inner part of the blade does not so greatly exceed that of the tip as in rigid blade types, the result being that less resistance to the stream line flow of water past the blades is produced.

If properly designed and manufactured these propellers should show fairly good efficiency. One advantage possesed by them is that a bent or broken blade can be replaced easily. Their principal disadvantage is their materially higher cost.

Reversing propellers have gone practically out of the market, due to the perfection of the reversing gear with which practically all but the very smallest two-cycle engines are equipped today.

The necessarily large hub probably caused considerable resistance loss, their cost was high, they had very little efficiency when set for backing, they did not have especial efficiency when going ahead, and when used with auxiliary engines in sailing vessels they impeded their speed.

Twin-screw installations are becoming more and more popular in power boats. While the reliability of marine engines is considered to be pretty nearly 100 per cent, still there is the added element of safety in twin-screw installation that makes it appeal to the boat owner. If one engine were to fail, the other should get him home.

In twin-screw installations, about the same pitch would be employed as in single-screw, and from two-

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From designs of a very successful schooner built 1926 which made a comfortable and fast cruise to Labrador

AN AUXILIARY SCHOONER SUITED FOR ANY WATERS

57′ 9″ O.A. 42′ 8″ W.L. 14′ 2″ Beam. 7′ 8″ Draft

CONSTRUCTION

Heavy — in excess of Lloyd's highest requirements.

ENGINE

32–40 h.p. 4-cyl. model "S" Frisbie gives speed of 7½ miles under power alone.

SAILS

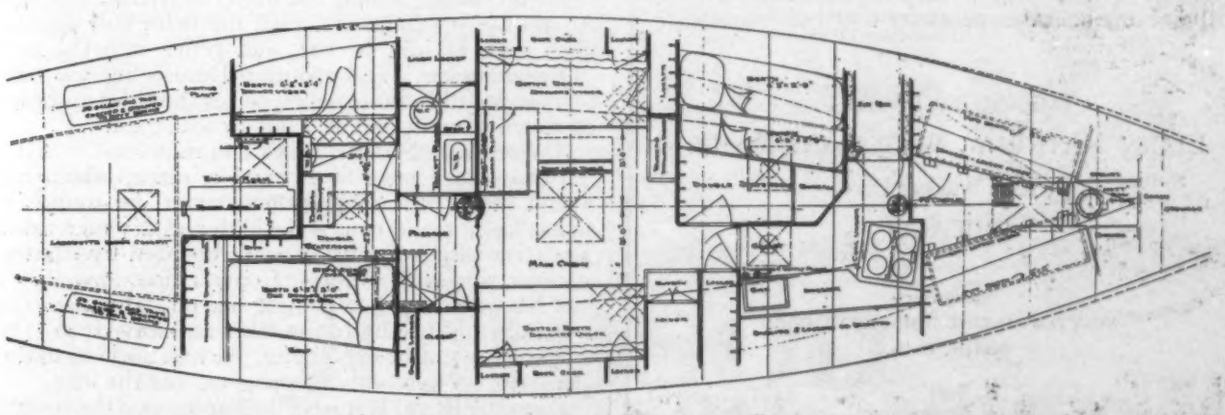
Complete including sail covers, four lower sails, topsail, fisherman staysail, jib topsail of Wamsutta duck.

EQUIPMENT

Complete legal and cruising equipment, tender, upholstery and electric light plant.

ACCOMMODATIONS

The accommodations are very roomy as shown on plan below. The double stateroom aft is unusually large. The berths are wide and fitted with spring mattresses. The main cabin is particularly livable, containing two spring transoms, ample lockers, buffet, and bookcases. It is well lighted and ventilated. The forward double stateroom is also fitted with spring berths. The galley space is excellent and forecastle will accommodate two or three men. White enamel and mahogany paneled.



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You can do no better than to profit by the experience of the above firms. These and many others, equally as prominent, have determined for themselves that the Elgin *Unit* Control Board meets every requirement for service and durability with the added feature of being compact and in full harmony with the boat. All instruments under one glass, indirectly lighted, will give any boat that necessary touch of refinement.

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thirds to three-fourths the diameter, with a rather narrower blade.

So far as efficiency is concerned, there is little choice between outwardly and inwardly turning propellers, although usually such installations turn outwardly in order to secure better maneuvering.

The only disadvantage I call to mind in twin-screw is that when the engines synchronize in speed, there is liable to be considerable vibration set up, especially in long boats of light construction, with powerful engines.

For satisfactory results in twin-screw installations it is essential that both propellers be of absolutely the same pitch.

While it might be interesting to illustrate some of the many different types that have been patented in the United States alone, it is practically agreed by those who have to do with propellers, that engine manufacturers are for the most part satisfied with present standard types, while power boat owners who can be suited, for the most part have been satisfied; and the few who are not and never can be quite satisfied, will continue to suggest and invent, and carry their troubles, trials and propeller vexations to the manufacturer, engine builder and naval architect, as they have been doing since early days of power boating.

(*To be concluded.*)

The Log of the *Ariel*

(*Continued from page 66*)

strong against us. Fortunately the wind held or we should have had to anchor. We made the city of Svenborg by one o'clock, anchored in a quiet spot off the city and had lunch. After lunch we had more narrow channel work but as the channel turns here in a S.W. direction we had the wind for a time abeam. We had not gone more than five miles, however, when the wind shifted to dead ahead and forced us to tack. We had thought of making Faaborg, but night was coming on and as Faaborg lay up at the end of another narrow channel, concluded instead to make for an anchorage well protected by outlying islands about three miles from Faaborg.

Here is where the veteran Alpine seaman "Oystercracker" distinguished himself. We were approaching our anchorage in fine shape. It was my watch and I was at the tiller. I brought *Ariel* up into the wind, stopped her headway and had her nicely placed about 100 yards from a wharf and expected "Oystercracker" to drop his hook. Instead of that he bursts into Danish, accompanied by many Swedish movements. "What's it all about?" says I to S. "Why the daily dozen now?"

"Damfino," says S. "I don't think he wants to anchor here."

Two men with divided minds can't run a boat so "Oystercracker," being the owner of *Ariel*, I give him the Alpine sign to come and take the helm and do what he likes with his old packet, and retire into the cockpit. "Oystercracker," still spouting Danish but too busy for further Swedish movements, seizes the tiller and runs her off down wind apparently out to sea again.

"Where's he bound?" says I to S.

"Damfino," says S. Around a mark, which anyone would know indicated shallow water, he rounds up in smart fashion and runs *Ariel* high and dry on a sand bar. Then the circus begins. We are boarded by sundry and various, who seem to spring from all directions. Every one has his own idea how to get her off. Mortified beyond words, S. and I retire to the cabin and leave it to "Oystercracker" to do the explaining. *We* had nothing to do with the boat, *we* were only passengers, was the idea.

Soon the Royal Danish Pilots appear on the scene. Two of them, in the Royal Danish pilot boat, painted green, also very chatty. "Oystercracker" bargains with them to pull us off. More people from the Royal Danish pilot boat

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Johnson 1927 MODELS

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The ideal motor for small runabouts, Baby Bum boats, racing hydroplanes and commercial craft. Weight, 85 pounds. Speed range, 2 to 27 m.p.h., depending upon type of boat used. Priced at $210.00

The new Big Twin

REALIZING that the outboard motoring public looks to Johnson for the outstanding developments in the industry, this year we offer new features which greatly increase power and performance in all twin models. A new four-port motor design has been introduced. This makes possible a material increase in power, with no increase in weight. It gives smoothness of power, a flexibility never before attained in outboard motors.

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Each of these features has contributed toward a material increase in propulsion efficiency.

A new motor has been developed, the Standard Twin, for those who desire a motor midway between the Light and the Big Twins in speed and power. This was especially designed for large rowboats and for racing. Whatever your requirements may be—for canoe, rowboat, racing or commercial craft—one of the outboard motors developed by Johnson will furnish you the ideal power and speed.

You may now choose from four motors, each with different power and each possessing the exclusive features which have made Johnson the world's largest manufacturer of outboard motors.

If you are considering the purchase of an outboard motor you owe it to yourself to see or, far better, try a Johnson, the acknowledged favorite of outboard motor users.

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came aboard, including the young son of Royal Danish Pilot No. 2. What does the young son do but immediately pull the peak halliard through the block at the head of the mast, *the wrong way*. That puts the mainsail out of commission, for it can't be hoisted until some one shins up the mast and reeves the halliard through the block again. Curses from "Oystercracker," who calls on the boy's father, Royal Danish Pilot No. 2, to climb the mast and fix it. Papa does it all right, but I am sorry for the boy when papa gets him home in the woodshed.

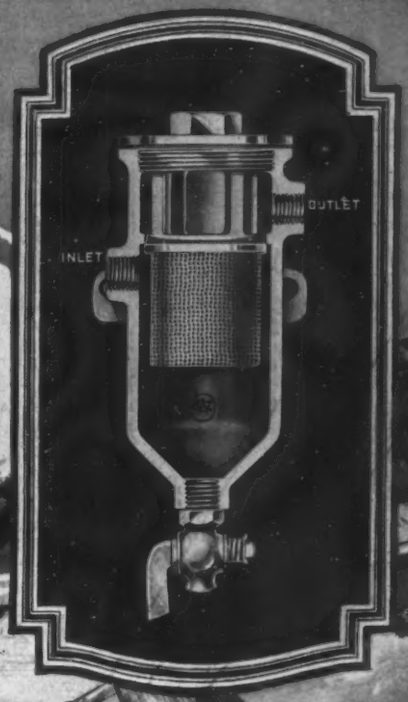
Well, the bargain was finally made — 10 Kroner or about $2.50 if she comes off easy, more, if she comes hard. How much more no one knows, depending on the hardness no doubt. The Royal Danish Pilots take hold. More Swedish movements from everybody as a small boat is upset in the preliminary maneuvers. The line tautens. *Ariel* shivers a bit and concludes to come. More Swedish movements — this time "registering joy," as the movie people say. The Royal Danish Pilots then tow us back to the exact spot I picked to anchor in when "Oystercracker" broke loose. We had a quiet supper that evening — no rollicking Viking songs from the fo'castle where the old sea dog "Oystercracker" dwelt. He was a chastened and subdued "Oystercracker" and he was shy 10 Kroner, for we made him settle with the undertakers. It was his funeral, not ours.

Sunday — August 1. Fog in the morning. Fine swim before breakfast, then a long walk in the country waiting for the fog to lift. By noon visibility was fair and we put to sea. We were hardly clear of our anchorage when the wind fell flat and then veered around and came in dead ahead. We were making for the port of Assens. It was a dead beat to windward and Assens was hidden away behind many reefs and shoals and up a channel. In Denmark spars with a cross on top mark the starboard side of a channel and those with round brooms mark the port side. The channels, however, are often narrow and numerous, leading in different directions. The coast is well lighted but on account of the large number of islands — there are 350 of them — there are many different channels and innumerable shoals and reefs. As a rule the water is shallow and most of it from 2 to 8 meters in depth. It requires a cool head and expert navigation to negotiate these waters after dark unless one is familiar with them. We were now a long way from Assens and night falling fast. Soon it was dark. We asked "Oystercracker" to light the running lights. He lit the port light but when it came to filling the starboard lamp with kerosene, the oil ran out of the container as fast as he poured it in — leaky lamp. We had to sail therefore without lights. One more discovery as to *Ariel's* equipment. S. here did a fine piece of navigation. He plotted the courses with great exactitude and we finally worked into Assens harbor at midnight.

Monday — August 2. We were tired when we turned in Sunday night after the long grind getting into Assens so did not turn out until 8 o'clock. We left Assens about 9, passing on our port hand Thor's Island where legend has it that Thor, the old Norse God of War, was born. It is a bare open spot running out into the sea. They have erected a great bronze group statue of Thor and his men on the highest spot on the island to commemorate the event and we could see it clear cut against the sky line as we sailed out from the harbor. Along the Danish coast are to be seen the burial mounds of the old Viking chiefs. They are round shaped and symmetrical and some have a ring of trees growing around them. This part of Denmark was the center of old Norse activity and the expeditions of the Vikings into distant lands and seas for conquest and plunder started from these shores.

After leaving Assens we soon came into the Little Belt, the smaller of the three channels connecting the Cattegat with the Baltic. Here we struck a very strong current,

WILCOX
Gasoline Strainer



Send for this book

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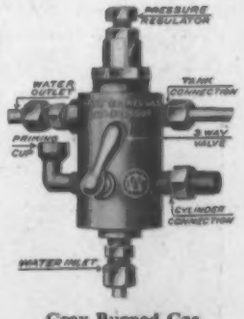
Buy Wilcox Fittings from your nearest dealer or write us for his address



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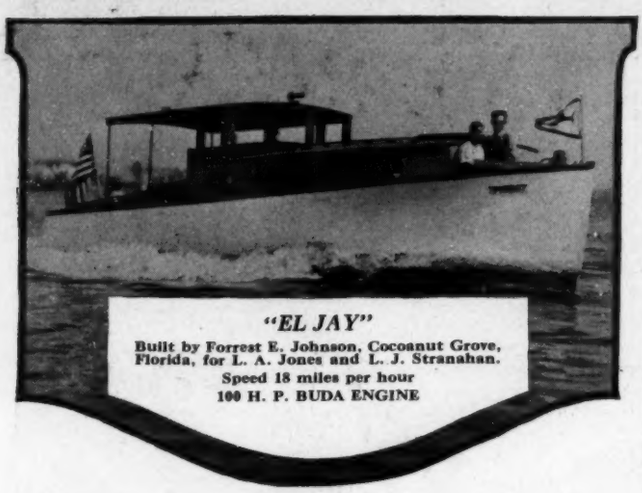
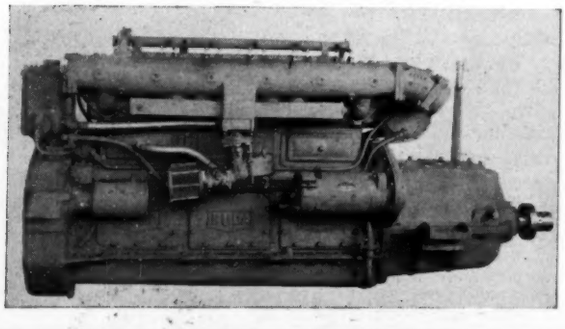


"EL JAY"
Built by Forrest E. Johnson, Cocoanut Grove, Florida, for L. A. Jones and L. J. Stranahan.
Speed 18 miles per hour
100 H. P. BUDA ENGINE

PRESENT-DAY demands for increased speeds and greater load carrying capacities place no tax on a BUDA — the power-plus motor built to withstand the stress and strain of the most gruelling service. The BUDA is a high duty engine in name and in fact. Skillful design, expert workmanship, standard parts and a definite knowledge of marine needs of today combine to make BUDA an outstanding accomplishment in modern engine building on a production basis. With service and parts available everywhere the BUDA is the safest power-plant investment the boat owner can make. While only a minimum of service is ever required by a BUDA owner, that service is nation-wide.

THE BUDA COMPANY
Established 1881
HARVEY (Chicago Suburb) ILLINOIS



BUDA POWER

fortunately for us flowing north and in our favor. There are no tides in the Baltic or the waters of Denmark. There are, however, strong currents in some of the channels produced by the wind blowing in one direction for any considerable length of time. If the wind blows from the south it dams the Baltic up, so to speak, with the result that when the wind shifts into an opposite quarter a strong current is set up southwards, and vice versa. The current in the Little Belt was running from four to five miles an hour. The water in places boiled and seethed. While the wind was against us and we had to tack quite often, the force of the current was such we made good speed.

Near Fredericia, quite a large town on the mainland of Jutland, is the site of a high overhead bridge which the Danish Government is planning to build. Tenders for bids for the construction of the bridge have been asked for. This will be the most difficult piece of bridge building work ever undertaken, in my opinion. The water is 120 feet deep. The bottom is hard and scoured. The current runs from four to five miles an hour both ways and no one ever knows when it changes the direction of its flow. The bridge towers 100 feet above water level or a total of 220 feet above the bottom of the sea. The Foundation Company being interested in submitting a proposal to the Danish Government for the building of the bridge, I naturally took this opportunity to stop and visit the site of the bridge and look into the local conditions. We stopped, therefore, at Fredericia, a port near the site of the bridge, arriving there about 3 P.M. In entering this harbor, "Oystercracker" again demonstrated his ability to do the wrong thing whenever the opportunity offered. The wind failed us completely when we were trying to make the harbor mouth. What does he do but lower the mainsail and thus deprive us of all motive power whatever. We drifted about aimlessly until near enough to a wharf to throw a line, when we sneak in ignominiously. After tying up to the wharf at Fredericia, we procured a car and drove to the bridge site, which we inspected and photographed. We then crossed over to the other side and inspected the site there. We also hunted up the local Government engineer to get what information we could regarding local conditions, etc. This done, we dined at an inn overlooking the water. As usual, had a capital dinner and returned to *Ariel* about 10 P.M. and then turned in. Fredericia is a fine town. Nice shops and an air of prosperity.

Tuesday — August 3. No wind when we woke up. Flat calm after breakfast. S. and I took a walk along the fortifications by the sea. Sun warm. Sea looked very inviting. Soon we came to a public bathing establishment. One for men, another for women. Not having any bathing suits, we chose the one for men. Had a fine swim and returned to *Ariel*. By this time a light wind had sprung up and we pulled out of Fredericia by noon. We lay our course N.E. by E. for the long pull across the Cattegat to the entrance of the Sound leading to Copenhagen, a run of over 100 miles. The wind at first was dead aft.

We made fine speed. The wind swung around abeam and increased in strength and *Ariel* stepped her best paces. Night came on and we divided up the watches between "Oystercracker," S. and myself. I took the first watch, 9 to 1 A.M., "Oystercracker" the second, 1 to 5, and S. the third, from 5 on. We made good progress, picking up one light after another until about 12:30, when the wind died down to next to nothing. Thanks to "Oystercracker's" general shiftlessness, we had no running lights. We did have a lantern, however, and we used it merrily, for the traffic is fairly thick in these waters. One steamer in particular, a passenger ship of the United Steamship Company, looked very big and near to us. For a minute it looked like a midnight bath in the waters of the Cattegat, but just as impact seemed unavoidable I brought old *Ariel* sharp up into the wind. The big mon-

EVINRUDE Announces 3 Remarkable New Services

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Free Trial Guarantee

First: From our exclusive copyrighted "Boat-Speed Chart" you know exactly what model EVINRUDE will give you the results you want on your boat. For the first time your purchase of an outboard motor is made without any guesswork whatsoever.

Second: Without instruction, you will attach motor to any boat in one minute. Then follow the simple operating directions.

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". . . within an hour or less, you will master every detail of starting, stopping, steering, reversing, trolling and speeding."

1. **New Free Trial Guarantee**
2. **New Boat-Speed Guide Determines Correct Model—** *Now know exactly what model to buy!*
3. **New Time Payments—** *Standardized terms on all models.*

"EVINRUDE" and "LEADERSHIP" — both mean the same in the outboard motor field. Look back through Evinrude history. *First* with a successful outboard motor, *first* with twin cylinders, *first* with a big twin. Evinrude's history is a succession of remarkable achievements.

Last month, in these columns, Evinrude announced two new motors—Speeditwin, with full 8 H. P., weighing only 75 pounds, and Fastwin, with full 4 H. P., weighing only 49 pounds. Hundreds of congratulatory letters have already rewarded the years of engineering development which the new models represent.

Now, to climax this triumph of greater value and finer motors than sportsmen tell us were expected, Evinrude announces three remarkable new services:

1 Evinrude guarantees complete mastery of any model and that you can operate it like a veteran within an hour or less. Read every word of this Free Trial Guarantee that refunds your money if not satisfied.

2 Evinrude's new, copyrighted "Boat-Speed Guide" tells you at a glance just what model will give you the results you want. Speed depends as much, if not more, on the hull as it does on the motor. Now nothing is untold—you know the facts before you spend your money on either boat or motor.

3 Only $30 puts any model Evinrude on your boat. Standardized down-payment; standardized low monthly terms from then on. A long time to pay, with no penalties for waiting to purchase until the boating season opens.

Evinrude SPEEDITWIN
Only 75 pounds
Full 8-H.P.

Evinrude FASTWIN
Only 49 pounds
Full 4-H.P.

Evinrude SPORT TWIN
Only 44 pounds
Full 2½-H.P.

Write for new 1927 Year Book, illustrating all models in actual colors and explaining the new Evinrude Plan in detail.

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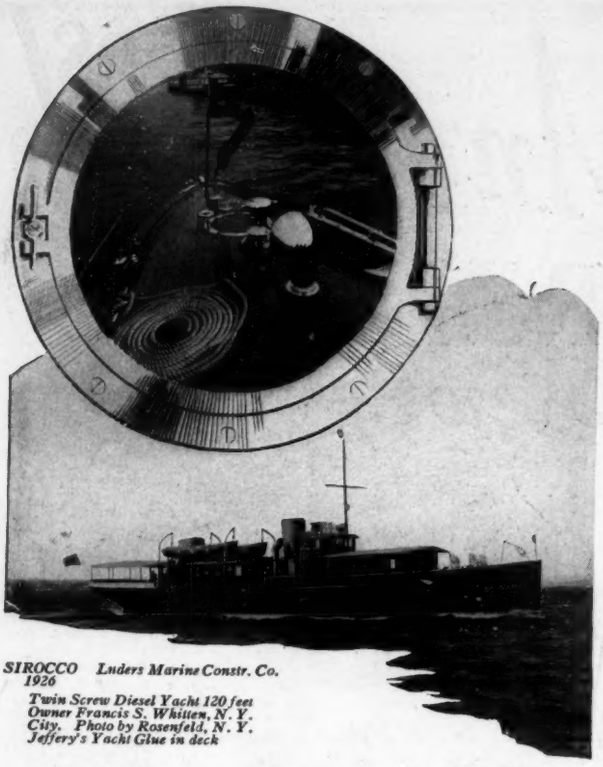
EVINRUDE BOAT-SPEED GUIDE (© 1927)

Note: This is an abbreviated listing of boats and maximum speeds. Ask for Evinrude Year Book showing additional standard type hulls with speeds complete for all. Trolling speeds as low as 2 M.P.H.

Type of Boat	Maximum Boat Speeds in Miles per Hour				
1 or 2 Occupants	Speeditwin	Fastwin	Sportwin	Single	Inboard Tw
Racing Hydroplanes 9'-14' Long	15-27	11-23	Not Recommended		
Square Stern Canoes 16-20 feet long	12-20	10-18	9-13	6-9	8-15
Light Round or V Bot. 12' to 18' Boats					Pointed Stern
Heavy Round or V Bottom Fishing Boats 12 to 18 feet long	10-18	9-16	6-11	6-8	7-12
	9-15	6-11	5-9	5-7	5-10

$30 Puts any EVINRUDE on your Boat



SIROCCO Luders Marine Constr. Co. 1926
Twin Screw Diesel Yacht 120 feet
Owner Francis S. Whitten, N. Y. City. Photo by Rosenfeld, N. Y.
Jeffery's Yacht Glue in deck

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THE reliability and beauty of Luders-built boats are the result of painstaking care in building and in the selection of only the best materials.

In keeping with this policy of using only the best, Luders always use Jeffery's Marine Glues.

"We have tested all forms of seams compositions and Marine Glues" write Luders, "and we have never found anything to compare with Jeffery's Marine Glues. It is not only the best in quality but it is the most economical when figured over a series of years, inasmuch as it saves two or more re-caulkings that would be needed if other inferior glues were used."

That is why in the construction of such famous boats as the "Sea Dream", "Sirocco", "Amido", "Ramme" and others, Jeffery's Marine Glue was used exclusively.

For Deck Seams — on Yachts and Motor Boats use — Jeffery's No. 1 Extra Quality Yacht Glue.

For Laying Canvas — use Jeffery's "C" Quality Liquid Marine Glue.

For Double-Plank Construction — use Ferdico Aviation Liquid Marine Glue.

For Bad Under-water Seams — use Ferdico Seam Filler.

Our booklet — "Marine Glues — What to use and How to use it" sent on request.

L.W. Ferdinand & Co.
152 Kneeland Street. Boston, Mass.

ster, all aglow with lights, swept by us, the proverbial "toss of a biscuit" away. However, in such matters a miss is as good as a mile. "Oystercracker" was below and asleep at the time. If we had to swim for it we wanted him to have as good a show as ourselves so we got him up on deck in time.

Wednesday — August 4. By daylight the wind freshened and was still abeam. We made the harbor of Gilleleie at the Danish end of the Sound opposite the coast of Sweden about 3 P.M.

After landing at Gilleleie we hunted up Mrs. Salto, who was stopping with friends at Hornbeck. We were invited to come out at once and join them in a bathing party. We gladly agreed. We all had a fine swim and then returned to the home of Mrs. Neilsen, Mrs. Salto's hostess. The two ladies changed their clothes and we then went to a summer hotel at Hornbeck where we had a capital dinner.

Thursday — August 5. No wind in the morning. The Sound looked like a mill pond. After breakfast Salto and I hired a car and drove 13 miles to the famous castle of Kronborg at Elsinore, the scene of Shakespeare's great play Hamlet. The drive along the Sound was beautiful.

We returned from Elsinore about 11:30. A light breeze sprang up and we pulled out at Gilleleie about 12:30 bound down the Sound for Copenhagen on the last leg of our cruise. When off Elsinore, "Oystercracker," who had been sound asleep for a couple of hours, comes on deck and wants to know where we are. S. tells him. Some discussion as to location and sailing direction leads to nasty remarks on his part. S. informs him that he has nothing to say about the vessel as the boat is under charter to us. Then "Oystercracker" springs his best one yet. He states to S. that he is master of his boat and commands her and that if we don't come to heel he will hoist the police flag and denounce us as mutineers! This is good! S. repeats the conversation to me and we go into roars of laughter. "Oystercracker" disappears and it is the last we hear from him on that subject. The wind now heads us when within a mile of our destination and loses its strength. The current in the Sound is running strong in a northerly direction against us. We barely make headway. At one time drift backwards. It takes us four hours before we make the harbor of Elsinore, where we tie up for the night.

Friday — August 6. Early investigation discloses little wind and what there is from the south, or dead against us. Copenhagen, our final destination, is 26 miles to windward. The current still running strong to the north and is also against us. However, we start about 8 o'clock and make slow progress tacking along the Danish coast. The wind freshens after awhile and we make better progress and finally pull into Copenhagen harbor at 6 A.M. — 14 days within four hours from the time we started. We go ashore with our dunnage, pay "Oystercracker" off and the cruise is over.

Before Her Time

(*Continued from page 71*)

visibility limited; but Smith's observation was a good one, and if he had finished working it out it would have shown him that at noon he was 15 miles N.N.W. of Gibbs Hill light. Now, 15 miles from Gibbs Hill on that bearing means only 9 miles from the edge of the reef; and Smith always took a good half hour to work out any sight, while the *Prophetess* took only 28 minutes to cover her last 9 miles. These facts, plus the poor visibility, will explain why the *Prophetess* smashed herself to matchwood on a ragged coral head and drowned her crew and her captain.

Which seems a pity, because I expect we shall have to wait another 300 years before someone turns up to show us how we may escape from the dear old tradition of sticks and strings and canvas.

A Most Unusual Motor

The 150 h.p. Kermath is a most unusual power plant in every respect.

Many authorities proclaim it the most modern marine motor on the market.

Incorporated in this advanced design is every sound engineering refinement ever developed.

Already in use in hundreds of boats, this powerful and efficient unit is attracting the attention of the most critical and experienced boat owners.

In this motor you will find such unusual features as 7-bearing crankshaft and 7-bearing overhead camshaft. Another unusual refinement is the extra large valve openings with four valves per cylinder. A new and higher standard of instantaneous acceleration is the result.

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Announces

Important Price Reductions In Dodge Watercars

To the Motorboating Public:

Owing to greatly increased sales and production of the standardized Dodge Watercars since January first, unexpected economies have been made possible in manufacturing costs. We hasten to pass these savings on to purchasers, effective on all boats bought for delivery this year.

Thus do we keep faith with the motorboating public. The Dodge Watercar, extensively improved for 1927, is now more than ever the greatest buy in the boating world — recognized as such by experts, who are not fooled by misleading comment or subtle propaganda. It is the best boat of its class regardless of price.

HORACE E. DODGE, *President.*

New Prices

Model 422
22½ feet — 5–7 passengers
30 h.p. Dodge Marine Engine
20 miles an hour
New Price — **$2195**

Model 822
22½ feet — 5–7 passengers
100 h.p. Dodge-Curtiss Marine Engine
35 miles an hour
New Price — **$2765**

Model 826
26 feet — 9–12 passengers
100 h.p. Dodge-Curtiss Marine Engine
35 miles an hour
New Price — **$3265**

New Model 630
The Dodge Watercar Senior
30 feet — 14 passengers — utmost luxury. 6-cyl. 250 h.p. Globe Marine Engine. 45 miles an hour. Deliveries of this model begin May first. Only 25 to be built during 1927
Price — **$7200**

Write for Illustrated "Book of the Dodge Watercar"

HORACE E. DODGE BOAT WORKS, INC.
572 Lycaste Ave., Detroit, Mich.

The Horace E. Dodge Memorial Trophy

The Management of Regattas

(*Continued from page 81*)

list handy. As the classes finish, they can be reëntered on the large official summary sheet.

You will notice that the above method uses four or six men only where the finishes are close. The club committee or the press representatives could be called upon to fill these emergency rôles, and there would be no need for the loud tolling of seconds nor stentorian calls for "silence!"

It has been suggested that a double starting and finishing line be used, with the committee boat in the middle (see Sketch). This system has, I understand, been used successfully at Marblehead by at least one club. It would undoubtedly speed up the starts, relieve congestion at the finish by half, and be very easy to work. The procedure is as follows:

The larger classes, such as the Forties, Thirties, 10-Meters, etc., start between the committee boat and the can buoy. The R Class, 6-Meters, Victories, etc., start between the committee boat and mark boat. The starting gun for the Forties is also the starting gun for the R Class, and so on down the line — two classes start on one gun, well separated, and thus cut in half the starting interval between the largest and smallest class.

The finish line is laid out in a similar manner to the starting line, perpendicular to the last leg of the course. The classes finish on the same line, relatively, as they started on. The congestion at the finish is cut exactly in half, and the timing made much simpler.

No doubt, now that I have started the ball a-rolling, other yachtsmen will have suggestions to make, and, should merit be found in them, possibly we can get the Association to take up our suggestions with its various members, with a view to still further improvement in race management for 1927.

Small Boat Racing in New England to Reach High Water Mark This Season

(*Continued from page 74*)

with Germany 21 years ago. The club will increase its fleet of Cape Cod knockabouts.

The Annisquam Yacht Club is almost as proud of its new clubhouse as it is of its four classes of small yachts, which stroll up and down Squam River three or four times a week. Across the bay racing has begun at old Newbury, on Plum Island River.

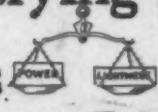
There is "O" boat racing at Prout's Neck and Falmouth Foreside, on either side of Portland, all Alden-designed boats built two years ago by the Cumberland Shipbuilding Co., of South Portland.

The North Haven dinghies furnish the sport in the Fox Island Thoroughfare, while up at Islesboro there is a fine lot of Manchester 17's which are raced by the Tarratine Club, of which Clinton H. Crane is a prominent member.

Vice Commodore Seth M. Milliken has gathered off the Kollegiwidgwok Club at East Blue Hill a bunch of Brutal Beasts and this year a class of "O" boats, acquired from Marblehead.

The largest and most active racing port on the Maine coast is Northeast Harbor. Between 30 and 40 boats in three classes race every Tuesday and Friday between July 15th and September 1st and hold interclub events with Tarratine, whose waters the fleet will visit this year. The Northeast Harbor fleet also holds an annual cruise to Blue Hill.

Two years ago Edsel B. Ford started a class of Winslow one-design 16-footers at both Seal and Bar Harbor and this year there will be 18 of these little boats on the east side of Mt. Desert. The newly organized Bar Harbor Yacht Club will hold its third open race in August. Winter Harbor, across the bay, will race a small fleet of 14-footers off the Grindstone.

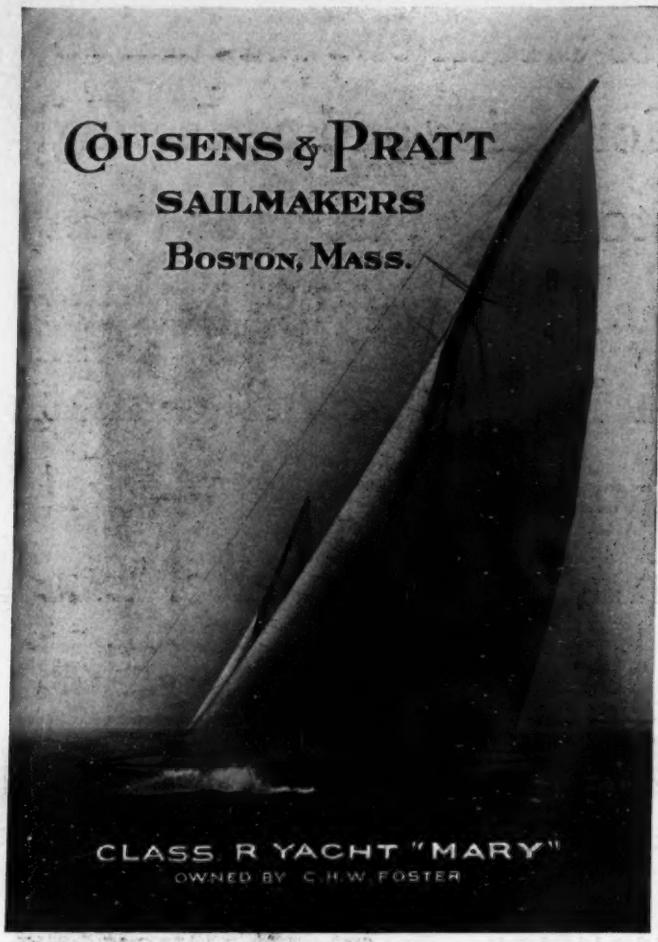
EACH year emphasizes afresh the leadership that Elto holds in pioneering and perfecting the modern outboard motor. The first light twin —that was Elto. The first satisfying balance of adequate power with lightness  — that was Elto. The first automatic tilt-up — and the first stream-line design — both Elto. The first propeller-operated cooling system —Elto. The only motor to provide the great advantages of rudder steering — that's Elto. And, above all and beyond all other qualities — easy, quarter-turn starting —Elto and only Elto offers it.

Send for the new Super Elto Catalog

Not even the new features of the 1927 Super Elto can overshadow the permanent advantages which Elto alone gives. But to tens-of-thousands of Elto users — steady in their confirmed belief that downright unparalleled dependability is the greatest thing in outboard motorboating — we offer this pledge: that in the finest of former Elto Models there never has been so impressive a quality of performance —so amazing a degree of eager, split-second starting — so abundant a wealth of day-in and day-out satisfaction — as Ole Evinrude has built into this newest Super Elto.

The Super Elto "Starts with a quarter turn"

ELTO OUTBOARD MOTOR COMPANY - - - Ole Evinrude, *President*, Mason St., Dept. 2 Milwaukee



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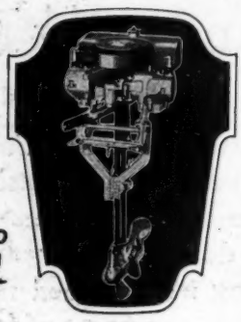
SPEED
over 20 miles per hour
MASTER CAILLE 5 SPEED TWIN



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THE CAILLE MOTOR COMPANY
6210 Second Blvd. Dept. B., Detroit, Mich.

Pay as You Play
$32.00
puts a motor on your boat. The rest in easy payments.

Honor Where Due

(*Continued from page 62*)

them back to sea. During the night all canvas except the furled spanker blew away. The three white men made shift to reef that and set it, but it too blew out before the vessel had time to round head to wind. The mate was injured and the donkey-man had both hands frozen, so the master steered her under bare poles across the Gulf of Maine and brought her to anchor in Yarmouth Roads, Nova Scotia, with no help from the others on board. This is what happens when through bad judgment or bad luck sail is not shortened in time. The vessel was undamaged.

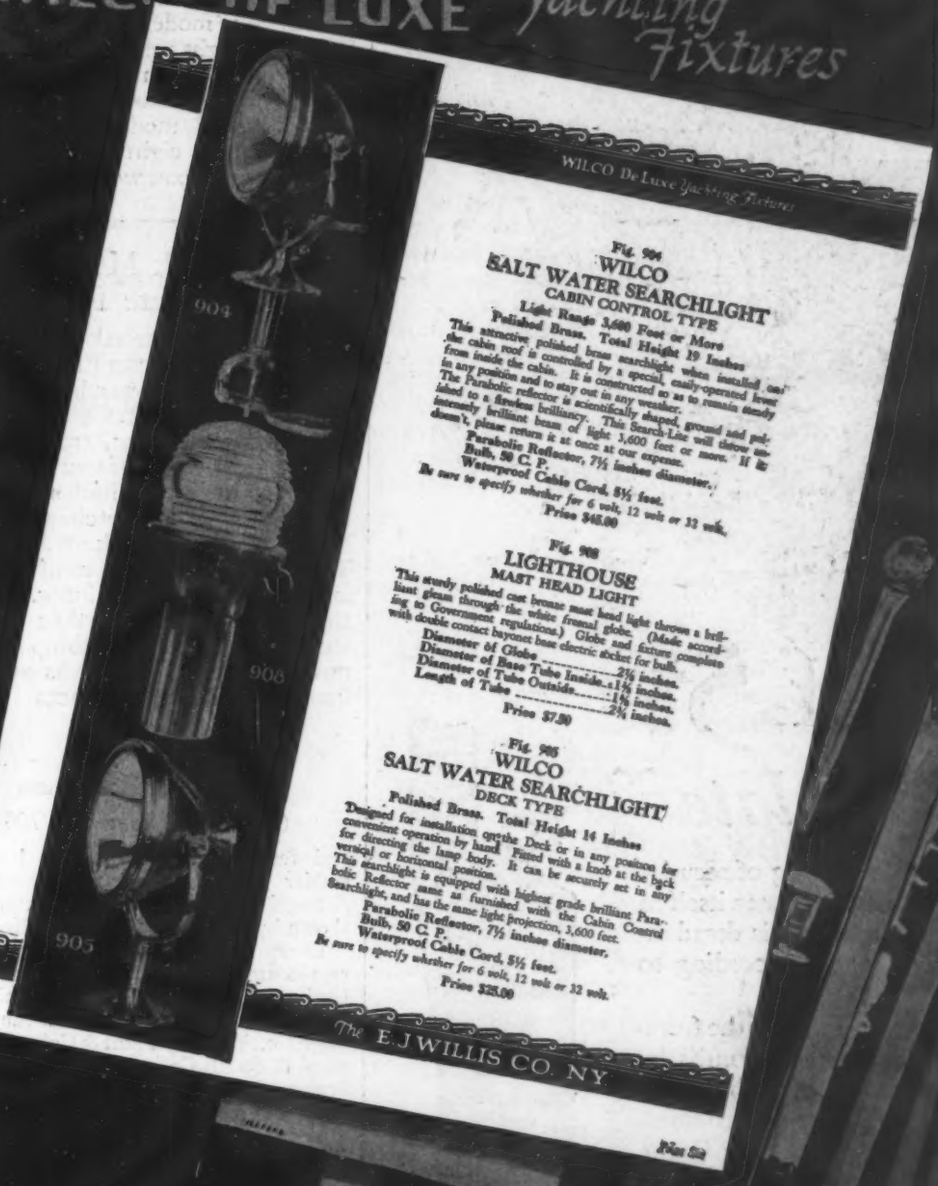
But my queerest experience in a coaster was entering a little New Brunswick port. After a dozen years of knocking round in small fore-and-aft rigged vessels one has certain ideas of how standard maneuvers should be performed, and in this case mine were all knocked galley-west. We were approaching the entrance with a fresh breeze over our port quarter when the skipper ordered the spanker lowered. The little harbor within was quite narrow and I wondered how in the world he would be able to round up in time without the aid of the spanker; but he grinned and told me the thing to look out for was that the spanker did not "take charge" and round her to against your will in shallow water with the wind aft. This was lesson number one. I was at the wheel and had a few rather nervous minutes: there was a big ground swell heaving in across the bar and in this the ship exhibited a strong tendency to round-to. At the same time she seemed to sag off bodily towards a series of ugly ledges under our lee, and between the two I had plenty of exercise trying to keep her in the fairway.

The skipper meantime had gone forward to superintend hauling down the jibs. This struck me as queer but later I realized that that was the business end of the ship. Although no effort was made to secure them it took a few minutes just to drag the four big headsails down, and I was all the time growing more and more anxious since we were dashing across the harbor at a lively pace and it did not look as though there was going to be room to round up. Surreptitiously I eased her off a little so as to give more room to shoot, but the skipper instantly noticed the change and waved me back on my course. When we were right in the middle — just about where it seemed to me the anchor should have gone — he waved me quite nonchalantly to put my helm a-lee. I took one look at the forested, clifty shore scarcely a cable-length to windward and shied like a frightened horse. But there was no mistaking his signals, so gritting my teeth and looking the other way I jammed the helm hard down.

She responded promptly, and at the same time there came a tremendous roar: the "old man" had let go the port anchor. However, the chain ran out unchecked and I still had visions of laying her forefoot on the rocks as she continued to round up. But presently her sails started to shake and as they did so her headway diminished very fast. As she lost way, of course, she ceased to turn, so the upshot was that she came to rest in a few moments with the wind abeam — and never did actually come up into the wind at all.

Letting the anchor go was not the answer: that was done merely to range out the chain which otherwise would have lain in a heap on the bottom. The ship was so deep and her skin friction so great that despite the tremendous momentum of her loaded hull she was bound to check as soon as the power propelling her was removed. The skipper knew this and was not at all worried about the cliffs to windward, so near. He knew she would merely spill the wind and stop. But I did not, and I called that lesson number two in the art of handling a big fore-and-aft rigged freighter. I was destined to learn several more before the voyage was done.

96 PAGES —
WILCO DE LUXE *Yachting Fixtures*


WILCO De Luxe Yachting Fixtures
Fig. 904
WILCO
SALT WATER SEARCHLIGHT
CABIN CONTROL TYPE
Light Range 3,600 Feet or More
Polished Brass. Total Height 19 Inches
This attractive, polished brass searchlight, when installed on the cabin roof is controlled by a special, easily-operated lever from inside the cabin. It is constructed so as to remain steady in any position and to stay out in any weather.
The Parabolic reflector is scientifically shaped, ground and polished to a flawless brilliancy. This Search-Lite will throw an intensely brilliant beam of light 3,600 feet or more. If it doesn't, please return it at once at our expense.
Parabolic Reflector, 7½ inches diameter.
Bulb, 50 C. P.
Waterproof Cable Cord, 5½ feet.
Be sure to specify whether for 6 volt, 12 volt or 32 volt.
Price $45.00
Fig. 908
LIGHTHOUSE
MAST HEAD LIGHT
This sturdy polished cast bronze mast head light throws a brilliant beam through the white frosted globe. (Made according to Government regulations.) Globe and fixture complete with double contact bayonet base electric socket for bulb.
Diameter of Globe ..... 2½ inches.
Diameter of Base Tube Inside..1⅛ inches.
Diameter of Tube Outside..... 1⅝ inches.
Length of Tube ..... 2½ inches.
Price $7.50
Fig. 905
WILCO
SALT WATER SEARCHLIGHT
DECK TYPE
Polished Brass. Total Height 14 Inches
Designed for installation on the Deck or in any position for convenient operation by hand. Fitted with a knob at the back for directing the lamp body. It can be accurately set in any vertical or horizontal position.
This searchlight is equipped with highest grade brilliant Parabolic Reflector same as furnished with the Cabin Control Searchlight, and has the same light projection, 3,600 feet.
Parabolic Reflector, 7½ inches diameter.
Bulb, 50 C. P.
Waterproof Cable Cord, 5½ feet.
Be sure to specify whether for 6 volt, 12 volt or 32 volt.
Price $25.00
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Washington Model Yacht Club

(*Continued from page 94*)

year. This is fine news, showing as it does the interest of the federal government in the work of the model yacht sailors. Municipal governments in other cities where there is interest in model sailing, but no facilities, might well follow this lead.

The Washington Club already has a good fleet of Class D boats, three large Class B models, and is now building some eight or ten limit C Class boats. Good work!

Prospect Park Model Sailors Distribute Prizes

The fourth annual dinner and "get-together" of the Prospect Park Model Yacht Club was held January 20th at the Hotel St. George, Brooklyn. Ten silver cups, trophies won during 1926, were presented. These were awarded to Charles Wanker, E. A. Bull, J. B. Ketcham, Walter Many and Frederick H. Tucker. The latter is commodore of the club and presided at the dinner. Among the junior sailors, Arthur O'Neill annexed the championship of the novice class and also was awarded first prize in the point races.

The Motor Boat Show

(*Continued from page 100*)

and feathering, besides stern bearings, rudder quadrants, stuffing boxes, etc. Attractive electric lighting outfits were shown by Homelite, Delco and Kohler.

Every kind of paint and varnish was represented, the more prominent firms having exhibits being Valspar Varnish and Paints, New Jersey Paint Co., the Debevoise Co., Woolsey Paint & Color Co., Edward B. Smith Co., who showed the finest brands of bottom paint, topside paint, and marine varnishes for every purpose.

For the interiors of fine yachts, Mosse showed some splendid yacht linens and blankets, while Ovington displayed a line of tastefully chosen china, both at reasonable prices. The Lux System of extinguishing fire was excellently demonstrated in the booth of Walter Kidde & Co.

Compasses, lights, binnacles, etc., were to be seen at several booths, the latest and best navigational equipment being shown by Kelvin & Wilfred O. White Co., their new compasses and binnacles attracting much favorable comment.

Several naval architects and yacht brokers were on the job, the booths of Mower & Humphreys and John G. Alden seeming to be the magnets with the strongest attraction.

The Geo. B. Carpenter Co., in addition to a fine line of marine specialties, showed a "rockerless rocking chair," and the H. M. Biglow Co. exhibited some very attractive folding yacht tables, with handsome decorations.

New Year's Racing at San Diego

(*Continued from page 83*)

handicap class sloop owned by L. Brawner, and one of the veterans on the bay, won the race, coming up at the finish to snatch victory from the R boats *Aloha* and *Angela*. The three yachts finished almost abreast of one another, making a beautiful picture as they came down the bay, dead before the wind, with only ten seconds between the three.

As a result of the success of the race, further winter racing is planned. There are now three R boats on San Diego Bay, and it is rumored that others are to be built, especially for winter racing.

Interclub Boats to Race Bermudians

ARRANGEMENTS are now being completed for a series of races between teams of four Sound Interclub boats and four Bermudian one-design craft, the races to take place off Hamilton, Bermuda, the first week in April, under the auspices of the Royal Bermuda Yacht Club.

The following Interclubs have been chosen to make the trip: *Wee Betty*, G. M. M. LaBranche; *Babette*, John B. Shethar; *Merrywing*, Louis Carreau; and *Lotus*, S. Wyman Aldrich. Among the skippers and crews will be W. W. Swan, J. B. Shethar, Louis Carreau, S. Wyman Aldrich, Rodney Williams, Chas. Weyand, Harry Curtis, Charles Jewett, Ralph Manning and Duncan Sterling, Jr.

A series of three or more team races, starting on April 2nd, will be followed by a free-for-all, and a special race for Interclubs alone. Series prizes have been offered by the Royal Bermuda Yacht Club for the winning team, the highest individual point scorer, and the two special races.

The Bermudian craft were designed in 1926 by Burgess, Swasey and Paine, and are about the same size as the Interclubs, being a bit narrower, with a trifle less sail, and more outside ballast. While no definite line is at present possible on the relative speed of the American and Bermudian craft, those who have studied the designs believe that the Interclubs will fare best in moderate weather and smooth going, while the Bermudians will have their innings in a stiff breeze and lump of a sea. All hands are looking forward to a close series, however, while the well known hospitality of the Bermudians assures a splendid reception for the American tars, win, lose or draw.

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